# LAKESIDE UNION SCHOOL DISTRICT BOARD OF TRUSTEES REGULAR MEETING AGENDA

Lakeside School Auditorium 14535 Old River Road Bakersfield, CA 93311 March 8, 2022 6:30 P.M.

Any materials required by law to be made available to the public prior to a meeting of the Board of Trustees of the District can be inspected at the following address during normal business hours: Lakeside Union School District Office, 14535 Old River Road, Bakersfield, CA 93311.

1.	CALI	L TO ORDER, ROLL CALL AND FLAG SALUTE
	BOA	RD OF TRUSTEES: Mario Buoni(MB) Alan Banducci(AB) Russell Robertson(RR) Darin Buoni(DB)
2.	PRES	SENTATION OF POU WATER FILTERS.
3.	PRES	SENTATION ON INDEPENDENT STUDY BY MR. BAILEY.
4.	All the	SENT AGENDA  e items listed under the Consent Calendar are considered by the Board to be routine and will be  ed by the Board in one action unless members of the board, staff or public request specific items  discussed and/or removed from the Consent Calendar. It is recommended the following be  eved or ratified:
	A.	Approve minutes of Regular meeting of February 8, 2022.
	B.	Approve minutes of Special meeting of February 11, 2022.
	C.	Approve minutes of Special meeting of February 15, 2022.
	D.	Approve minutes of Special meeting of February 23, 2022.
	E.	Approve February End of Month Payroll - \$665,183.45.
	F.	Approve B-Warrants #7
		Moved       Seconded       Roll Call Vote: MB       AB       TJ       RR       DB         Vote: Yes(Y)       No(N)       Abstained(A)       Absent(AB)
5.	HEAF	RING OF STAFF AND/OR CITIZENS This agenda item is included to allow members of the public

opportunity to ask questions or discuss non-agenda items with the Board. There will be a three-minute time limit

6. CLOSED SESSION

per person or twenty minutes total per item. (BB9323)

		-	cy Claimed Aga e of Claimant: V	inst: Lakeside Unic ivian Vasquez	on School District			
	B.	Confe	erence with Labo	or Negotiators (G.C	. 54957.6)			
				ganizations: LTA ar ators: Ty Bryson	nd CSEA			
7.	OPE	N SESS	ION					
8.	REP	ORT OF	CLOSED SESS	SION				
9.	DIS	CUSSIO	N OR ACTION	ITEMS				
	A.	Genei	ral Control					
		(1)	Approval of U	pdated Dress Code	-			
			MovedVote: Yes(Y)	SecondedNo(N)	Roll Call Vote:MB_ Abstained(A)	ABTAb:	JRR_ sent(AB)_	DB
	В.	Budge	et and Finance					
		(1)		econd Interim Repor	ort and Authorization to t.	Make Budg	get Adjustr	nents
			MovedVote: Yes(Y)	SecondedNo(N)	Roll Call Vote:MB_ Abstained(A)	ABT.	IRR_ sent(AB)	DB
		(2)	Approval of A		KCSOS Division of Spe			
			Moved	Seconded	Roll Call Vote:MB_	ABT.	rRR	DB
			Vote: Yes(Y)	No(N)	Abstained(A)	Abs	sent(AB) _	
		(3)	Discussion and Project.	d Possible Action o	f Bid Response for the I	Lakeside Ne	twork Elec	ctronics
			Moved	Seconded	Roll Call Vote:MB_ Abstained(A)	ABTJ	RR	DB
			Vote: Yes(Y)	No(N)	Abstained(A)	Abs	sent(AB) _	
	C.	Person	nnel					
		(1)	Approval to hi	re Scyotria Willian	ns-Wilson, Bus Driver/U	Itility.		
			Moved	Seconded	Roll Call Vote:MB_	_ABTJ	RR	DB
			Vote: Yes(Y)	No(N)	Abstained(A)	Abs	sent(AB)_	. =

LIABILITY CLAIM

A.

		(2)	Approval to him	re Sandra Medina, E	Bus Driver/Utility.				
			MovedVote: Yes(Y)_	Seconded No(N)	Roll Call Vote:MB Abstained(A)	_AB_	TJ_ _Absent(2	_RR AB) _	_DB
		(3)	Approval to him	re Carolina Lomeli,	Paraprofessional at Lal	keside.			
			Moved Vote: Yes(Y)_	SecondedNo(N)	Roll Call Vote:MB Abstained(A)	_AB_	TJ _Absent(A	RR_ AB)_	_DB
		(4)	Approval to hir	e Wendy Canelas, 3	3.75 hour Small Group	Instruc	tion Teac	her at	Suburu.
			Moved_ Vote: Yes(Y)_	SecondedNo(N)	Roll Call Vote:MB Abstained(A)	_AB_	TJ_ _Absent(A	RR_ AB)_	_DB
		(5)	Approval to hir	e Jasmine Madrigal	, 3.75 hour Small Grou	ıp Instr	uction Te	acher	at Suburı
			Moved_ Vote: Yes(Y)_	SecondedNo(N)	Roll Call Vote:MB Abstained(A)	_AB_	TJ_ _Absent(A	RR_ AB)_	_DB
		(6)	^ ^	ertificated Employee on Written Request	e to Receive Catastroph to the Board.	ic Leav	ve Credits	from	District
			MovedVote: Yes(Y)	SecondedNo(N)	Roll Call Vote:MB Abstained(A)	_AB_	TJ _Absent(A	RR_ AB)_	_DB
		(7)			Between the Lakeside Viciation and its Lakesid				
			MovedVote: Yes(Y) _	SecondedNo(N)	Roll Call Vote:MB Abstained(A)	_AB_	TJ _Absent(A	RR_ AB) _	DB
		(8)	Reopener Propo year pursuant to	osal to the Lakeside  O Government Code	akeside/Suburu Teache Union School District section 3547. A public Board of Trustees for th	for the hearing	2022-202 ig regardi	23 sch ng the	;
		(9)	Approval of Ne	w Certificated Posi	tion, School Psycholog	ist Iner	n.		
			Moved_ Vote: Yes(Y)_	SecondedNo(N)	Roll Call Vote:MB Abstained(A)	_AB_	TJ _Absent( <i>A</i>	RR AB) _	_DB
10.	REPO	RTS Al	ND CORRESPO	NDENCE					
	A.	Enroll	ment	Lakeside 683	3 Suburu 844		Total 1	527	
	B.	Corres	pondence						
	C.	CSEA							

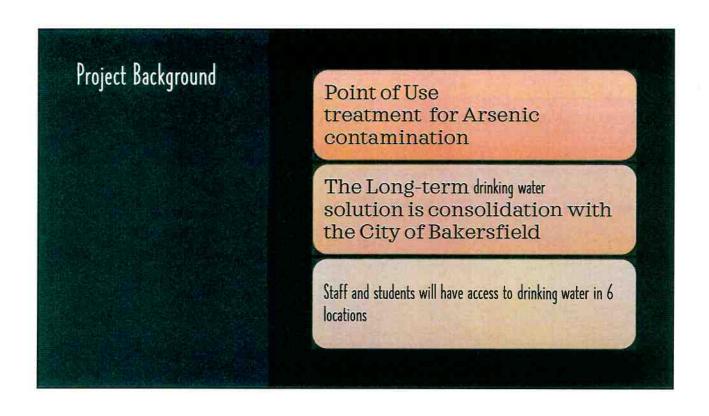
- D. CTA
- E. Board Members Reports Each Board member may report about various matters involving the District. There will be no Board discussion except to ask questions and refer matters to staff and no action will be taken unless placed on an agenda for a subsequent meeting.
- F. Superintendent Report
- 11. ITEMS NOT ON THE AGENDA Note: The Board is generally prohibited from discussing items, not on the agenda. Under limited circumstances, the Board may discuss and act on items not on the agenda if they involve an emergency affecting the safety of persons or property, or a work stoppage, or if the need to act came to the attention of the District too late to be included on the posted agenda.
- 12. ADVANCE PLANNING
  - A. Future Meeting Dates
    - (1) Regular Board Meeting April 12, 2022 at 6:30 p.m. in the Lakeside Auditorium.
- 13. ADJOURNMENT

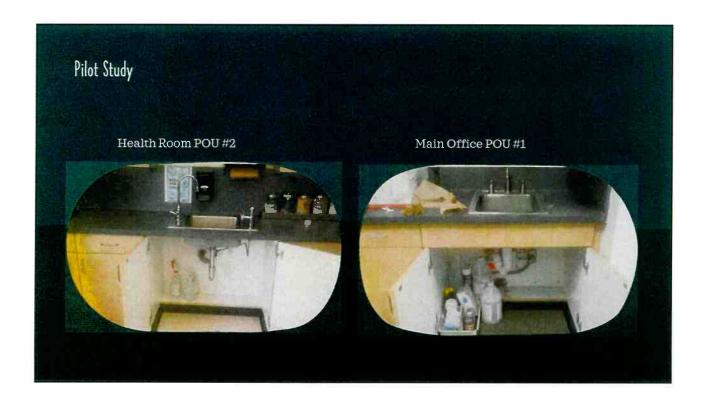
  Moved\_\_\_Seconded\_\_Roll Call Vote:MB\_AB\_TJ\_RR\_DB\_
  Vote: Yes(Y) \_\_No(N) \_\_Abstained(A) \_\_Absent(AB) \_\_\_\_\_

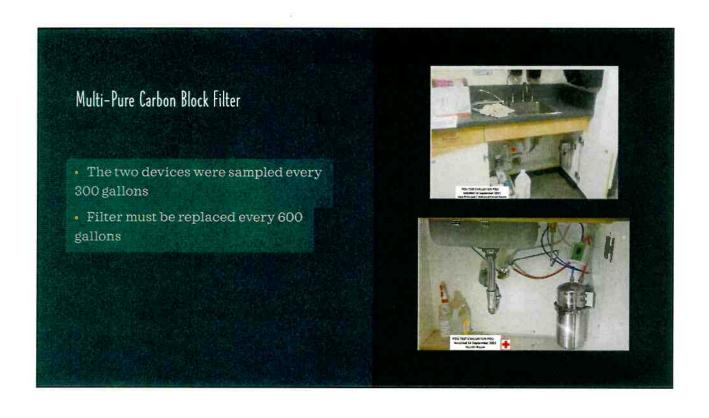
For information regarding how, to whom, and when a request for disability-related modification or accommodation, including auxiliary aids or services, may be made by a person with a disability who requires a modification or accommodation to participate in the public meeting, please contact Ty Bryson, District Superintendent.

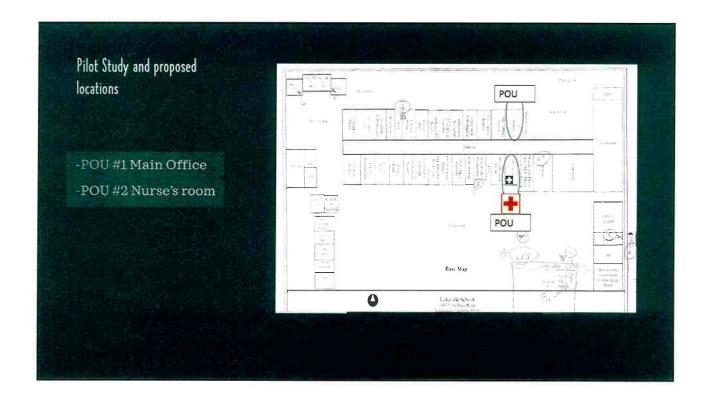


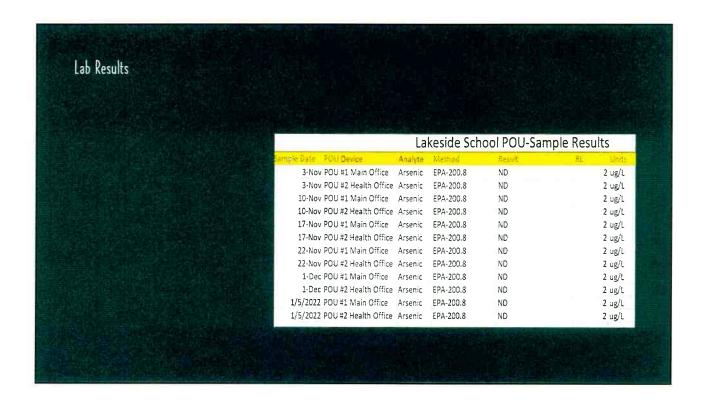


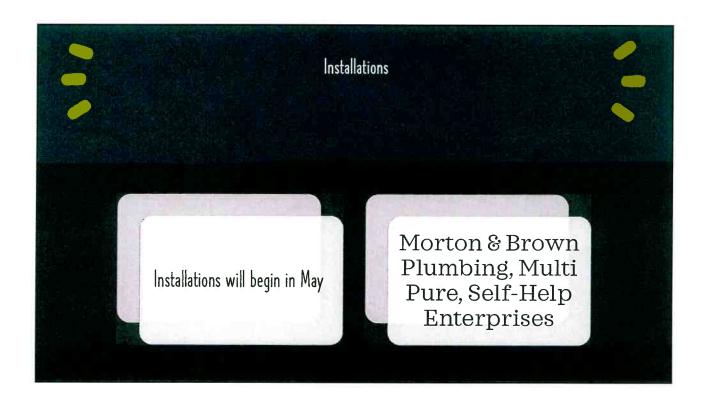


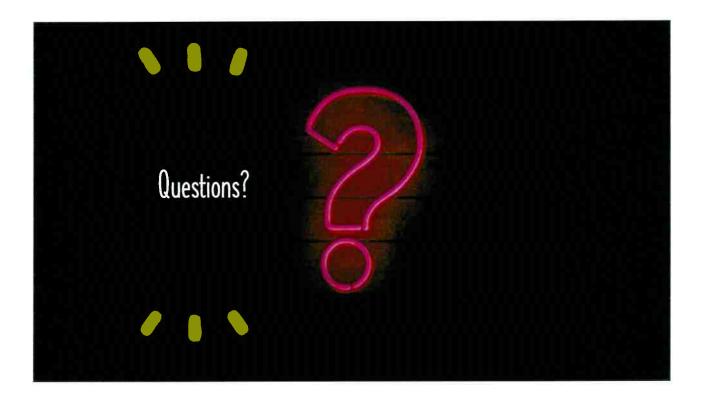












KERN COUNTY SUPERINTENDENT OF SCHOOLS	COMMEDIAL MADDANIA TOTAL	CONTROL MARKANI KECINIEK	TOTAL STREET CHIKEGINES GOT
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02/02/22 PAGE

0 LAKESIDE UNION SCHOOL DISTRICT FOR WARRANTS DATED 02/02/2022

DISTRICT: 040 LAKESIDE UNION SCHOOL DISTRICT BATCH: 0007 RUSH PAYMENTS
FUND : 01 GENERAL FUND

APY250 L.00.06

WARRANT	4	NAME (REMIT) REFERENCE IN	DEPOSIT TYPE FD-RESC-Y-OBJT.SO-GOAL-FUNC-STE-T2	ABA -TY3-TYP4	NUM ACCOUNT NUM DESCRIPTION	THILOWE
44796554	002455/	INC. AAA NETWORK	K SOLUTIONS			TATOOLET
	220001	PO-220001 1.	01-7425-0-5800.00-0000-7200-000 WARRANT TOTAL	0000-000-00-000	B-RATE	9,802.40
44796555	002404/	BASPA				7,002.4
		PV-220151	01-7425-0-5200.00-0000-3600-0	3600-000-00-000-000-0000 TOTAL		65.00
44796556	102726/	DARRELL HOWARD				
		PV-220150	01-7425-0-5200.00-0000-3600-0	00-0000-3600-000-00-000-000 WARRANT TOTAL	MILEAGE	208.85
44796557	002476/	ISAAC MEZA				58.83
		PV-220153	01-7425-0-5200.00-0000-3600-0	00-0000-3600-000-00-000-000 WARRANT TOTAL	MILEAGE	101.09
44796558	002169/	PEST BUSTER				
		PV-220149	01-7422-0-5500.00-0000-8100-0	00-0000-8100-000-00-000-0000 WARRANT TOTAL	13037,12990,12965	00.006
44796559	002160/	PLC HEATING & A	AIR			
		PV-220152	01-3213-0-5800.00-0000-8100-000-000 WARRANT TOTAL	0000-000-00-000	HVAC	22,511.38 \$22,511.38
44796560	002356/	WEX BANK				)
		PV-220154	01-0000-0-4300.00-0000-8100-000 WARRANT TOTAL	0000-000-00-000	FUEL	346.38
90088662	000270/	WHOLESALE FUELS	INC. 99 EFT			
		PV-220155	01-0000-0-4300,00-0000-3600-000 WARRANT TOTAL	0000-000-00-000	FUEL FOR BUSES	4,461.62
*	*** FUND TO	TOTALS ***	TOTAL NUMBER OF CHECKS: TOTAL ACH GENERATED: TOTAL EFT GENERATED: TOTAL PAYMENTS:	7 TOTAL 0 TOTAL 1 TOTAL 8 TOTAL	AL AMOUNT OF CHECKS: AL AMOUNT OF BFT: AL AMOUNT OF BFT: AL AMOUNT:	\$33,935.10* \$.00* \$4,461.62* \$38,396.72*
*	*** BATCH TOTALS	TALS ***	TOTAL NUMBER OF CHECKS: TOTAL ACH GENERATED: TOTAL EFT GENERATED: TOTAL PAYMENTS:	7 TOTAL 0 TOTAL 1 TOTAL 8 TOTAL	AL AMOUNT OF CHECKS: AL AMOUNT OF ACH: AL AMOUNT OF EFT:	\$33,935.10* \$4,461.62* \$38,396.72*
*	*** DISTRICT TO	TOTALS ***	TOTAL NUMBER OF CHECKS: TOTAL ACH GENERATED: TOTAL BFT GENERATED: TOTAL PAYMENTS:	7 TOTAL 0 TOTAL 1 TOTAL 8 TOTAL	AL AMOUNT OF CHECKS: AL AMOUNT OF ACH: AL AMOUNT OF EFT: AL AMOUNT:	\$33,935.10* \$4,461.62* \$38,396.72*
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### CLAIM FOR DAMAGES TO PERSON OR PROPERTY



#### INSTRUCTIONS:

- 1. Claims for death, injury to person or personal property must be filed not later than 6 months after the occurrence. (Govt. Code Sec. 911.2)
- 2. Claims for damage to all other property must be filed not later than 1 year after the occurrence.
- 3. Attach separate sheets, if necessary, and sign each sheet.
- 4. Claim must be filed with the School District (Govt. Code 915a).

To: (Name of School District)
Lakeside Union School District
Name of Claimant and age, including name of parent or guardian if required:
Vivian Vasquez 42 y/o
Address of Claimant: 5505 Glacier Court, Bakersfield, CA
Telephone Number: (661) 378-5567
Address where notices are to be sent: <u>Downtown LA Law: 601 N. Vermont Ave., Los Angeles CA 90004</u>
When did injury or damage occur? Give full particulars, date & time of day:
08/19/2021 Approx. 2:45pm
W7 1'1' 1 O.D. '1. C.H. 1 .'1 1' 1
Where did injury or damage occur? Describe fully and provide diagram where appropriate, give
street name and address and measurements from landmarks. (Use second page if necessary):  Donald E. Suburu Elementary School
7315 Harris Rd., Bakersfield, CA 93313
How did injury or damage occur? Give full particulars (Use second page if necessary):
Ms. Vasquez was picking up her daughter from school when suddenly she was assaulted by another parent.
The employees have a duty to ensure the safety of the premise and failed to do so and failed to properly notify
police. Lakeside Union School District negligently trained, supervised and hired their employees.
What particular act or omission do you claim caused the injury or damage? Give names of
school district employees causing injury or damage, if known: The Lakeside Union School District
failed to properly train, hire, and supervise Suburu Elementary School employees and failed to ensure the safety of
the premise.
What damage or injury do you claim resulted? Give full extent of injury or damages claimed:
Injuries include but are not limited to scratches to her face and arms, bruising in right eye, swelling on head, and neck.
What amount do you claim on account of each item of injury or damage as of the date of
presentation of this claim, including prospective injury, damages or loss, and give basis of
computation of amount (Use second page if necessary): \$1,000,000.00. Basis for computation;  Bodily Injuries, pain and suffering.
Bodhy mjanos, pan and canomig.
(continued on reverse side)

Name and address of witnesses, doctors and hospitals:
State amount claimed as damages, please attach any supporting bills, receipts, or estimates of cost (Please indicate):
Less than \$10,000.00 \$(State specific amount)
\$10,000.00 - \$25,000.00 (Limited Civil)
_✓ More than \$25,000.00 (Unlimited Civil)
Additional information that might be helpful in considering this claim:
Signature of Claimant or person filing on his behalf, giving relationship to claimant:
Legal Assist. @ DTLA Law Jazmin Ramos OBO Vivian Vasquez 2/16/2022 Signature Typed name Date

NOTE: Claims must be filed with the School District (Govt. Code 915a). Presentation of a false claim is a felony (Penal Code Section 72.)

Description	Resource Codes	Object Codes	Original Budget (A)	Board Approved Operating Budget (B)	Actuals To Date (C)	Projected Year Totals (D)	Difference (Col B & D) (E)	% Diff (E/B) (F)
A. REVENUES								
1) LCFF Sources	8	3010-8099	13,941,666.00	13,941,666.00	8,012,431.38	14,963,935.00	1,022,269.00	7.3%
2) Federal Revenue	8	100-8299	577,581.00	577,581.00	669,839.00	3,299,629.00	2,722,048.00	471.3%
3) Other State Revenue	8	300-8599	558,845.00	558,845.00	1,157,629.88	2,150,698.00	1,591,853.00	284.8%
4) Other Local Revenue	8	8600-8799	840,083.00	840,083.00	464,118.33	840,083.00	0.00	0.0%
5) TOTAL, REVENUES			15,918,175.00	15,918,175.00	10,304,018.59	21,254,345.00		347
B. EXPENDITURES								
1) Certificated Salaries	1	000-1999	6,061,029.00	6,061,029.00	3,334,999.66	6,666,571.00	(605,542.00)	-10.0%
2) Classified Salaries	2	2000-2999	1,917,708.00	1,917,708.00	1,067,396.17	2,094,318.00	(176,610.00)	-9.2%
3) Employee Benefits	31	000-3999	4,260,464.00	4,260,464.00	2,158,875.11	4,693,482.00	(433,018.00)	-10.2%
4) Books and Supplies	4	000-4999	456,314.00	456,314.00	658,558.83	2,687,746.00	(2,231,432.00)	-489.0%
5) Services and Other Operating Expenditures	5	000-5999	1,289,774.00	1,289,774.00	754,714.34	2,415,293.00	(1,125,519.00)	-87.3%
6) Capital Outlay	66	000-6999	0.00	0.00	0.00	226,992.00	(226,992.00)	New
7) Other Outgo (excluding Transfers of Indirect Costs)		100-7299 400-7499	1,916,264.00	1.916,264.00	1,874,682.75	1,916,264.00	0.00	0.0%
8) Other Outgo - Transfers of Indirect Costs	7:	300-7399	0.00	0.00	0.00	0.00	0.00	0.0%
9) TOTAL, EXPENDITURES			15,901,553.00	15,901,553.00	9,849,226.86	20,700,666.00		
C. EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES BEFORE OTHER FINANCING SOURCES AND USES (A5 - B9)			16,622.00	16,622.00	454,791.73	553,679.00		
D. OTHER FINANCING SOURCES/USES								
Interfund Transfers     a) Transfers In	89	900-8929	0.00	0.00	0.00	0.00	0.00	0.0%
b) Transfers Out	76	600-7629	0.00	0.00	0.00	0.00	0.00	0.0%
Other Sources/Uses     a) Sources	89	930-8979	0.00	0.00	0.00	0.00	0.00	0.0%
b) Uses	76	630-7699	0.00	0.00	0.00	0.00	0.00	0.0%
3) Contributions	89	980-8999	0.00	0.00	0.00	0.00	0.00	0.0%
4) TOTAL, OTHER FINANCING SOURCES/US	ES		0.00	0.00	0.00	0.00		

Description R	esource Codes	Object Codes	Original Budget (A)	Board Approved Operating Budget (B)	Actuals To Date (C)	Projected Year Totals (D)	Difference (Col B & D) (E)	% Diff (E/B) (F)
E. NET INCREASE (DECREASE) IN FUND BALANCE (C + D4)		NE III II	16,622.00	16,622.00	454,791.73	553,679.00		#F
F. FUND BALANCE, RESERVES								
Beginning Fund Balance     As of July 1 - Unaudited		9791	1,313,175.35	1,313,175.35		1,313,175.35	0.00	0.0%
b) Audit Adjustments		9793	0.00	0.00		0.00	0.00	0.0%
c) As of July 1 - Audited (F1a + F1b)			1,313,175.35	1,313,175.35		1,313,175.35		
d) Other Restatements		9795	0.00	0.00		0.00	0.00	0.0%
e) Adjusted Beginning Balance (F1c + F1d)			1,313,175.35	1,313,175.35		1,313,175.35		
2) Ending Balance, June 30 (E + F1e)			1,329,797.35	1,329,797.35		1,866,854.35		
Components of Ending Fund Balance a) Nonspendable								
Revolving Cash		9711	0.00	0.00		0.00		
Stores		9712	0.00	0.00		0.00		
Prepaid Items		9713	0.00	0.00		0.00		
All Others		9719	0.00	0.00		0.00		
b) Restricted		9740	386,317.40	386,317.40		750,383.40		
c) Committed Stabilization Arrangements		9750	0.00	0.00		0.00		
Other Commitments d) Assigned		9760	0.00	0.00	a art	0.00		
Other Assignments		9780	0.00	0.00		0.00		
e) Unassigned/Unappropriated								
Reserve for Economic Uncertainties		9789	0.00	0.00		0.00		
Unassigned/Unappropriated Amount		9790	943,479.95	943,479,95		1,116,470,95		

Description Resource Cod	Object es Codes	Original Budget	Board Approved Operating Budget (B)	Actuals To Date (C)	Projected Year Totals (D)	Difference (Col B & D) (E)	% Diff (E/B) (F)
LCFF SOURCES			3-7		,5,7	(=)	(. 2
Principal Apportionment State Aid - Current Year	9044	0.754.070.00	0.754.070.00	4 0 4 4 0 4 0 0 0	0.705.404.00	(2.242.222.22)	
	8011	8,751,372.00	8,751,372.00	4,644,848.00	6,735,104.00	(2,016,268.00)	-23.0
Education Protection Account State Aid - Current Year	8012	2,968,169.00	2,968,169.00	1,837,270.00	5,722,148.00	2,753,979.00	92.8
State Aid - Prior Years	8019	0.00	0.00	0.00	(7,000.00)	(7,000.00)	Ne
Tax Relief Subventions Homeowners' Exemptions	8021	16,370.00	16,370.00	2,567.23	16,370.00	0.00	0.0
Timber Yield Tax	8022	0.00	0.00	0.00	0.00	0.00	0.0
Other Subventions/In-Lieu Taxes	8029	0.00	0.00	0.00	0.00	0.00	0.0
County & District Taxes							
Secured Roll Taxes	8041	2,221,973.00	2,221,973.00	1,263,147.22	2,451,788.00	229,815.00	10.3
Unsecured Roll Taxes	8042	199,161.00	199,161.00	233,851.59	199,161.00	0.00	0.0
Prior Years' Taxes	8043	0.00	0.00	2,797.78	61,743.00	61,743.00	Ne
Supplemental Taxes	8044	40,256.00	40,256.00	32,785.25	40,256.00	0.00	0.0
Education Revenue Augmentation							
Fund (ERAF)	8045	(249,135.00)	(249,135.00)	0.00	(249,135.00)	0.00	0.0
Community Redevelopment Funds (SB 617/699/1992)	8047	0.00	0.00	0.00	0.00	0.00	0.0
Penalties and Interest from Delinquent Taxes	8048	1,500,00	1,500.00	1,172.82	1,500.00	0.00	0.0
Miscellaneous Funds (EC 41604)	0010	1,000.00	1,000.00	1,172.02	1,300.00	0.00	0.0
Royalties and Bonuses	8081	0.00	0.00	0.00	0.00	0.00	0.0
Other In-Lieu Taxes	8082	0.00	0.00	0.00	0.00	0.00	0.0
Less: Non-LCFF							
(50%) Adjustment	8089	0.00	0.00	0.00	0.00	0.00	0.0
Subtotal, LCFF Sources		13,949,666.00	13,949,666.00	8,018,439.89	14,971,935.00	1,022,269.00	7.3
LCFF Transfers							
Unrestricted LCFF							
Transfers - Current Year 0000	8091	0.00	0.00	0.00	0.00	0.00	0.0
All Other LCFF Transfers - Current Year All Other	8091	0.00	0.00	0.00	0.00	0.00	0.0
Transfers to Charter Schools in Lieu of Property Taxes	8096	(8,000,00)	(8,000.00)	(6,008.51)	(8,000.00)	0.00	0.0
Property Taxes Transfers	8097	0.00	0.00	0.00	0.00	0.00	0.0
LCFF/Revenue Limit Transfers - Prior Years	8099	0.00	0.00	0.00	0.00	0.00	0.0
TOTAL, LCFF SOURCES		13,941,666.00	13,941,666.00	8,012,431.38	14,963,935.00	1,022,269.00	7.3
EDERAL REVENUE					. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,022,200.00	7.0
Maintenance and Operations	8110	0.00	0.00	0.00	0.00	0.00	0.0
Special Education Entitlement	8181	206,588.00	206,588.00	0.00	206,588.00	0.00	0.0
Special Education Discretionary Grants	8182	14,853.00	14,853.00	0.00	14,853.00	0.00	0.0
Child Nutrition Programs	8220	0.00	0.00	0.00	0.00	0.00	0.0
Donated Food Commodities	8221	0.00	0.00	0.00	0.00	0.00	0.0
Forest Reserve Funds	8260	0.00	0.00	0.00	0.00	0.00	0.0
Flood Control Funds	8270	0.00	0.00	0.00	0.00	0.00	0.0
Wildlife Reserve Funds	8280	0.00	0.00	0.00	0.00	0.00	0.0
FEMA	8281	0.00	0.00	0.00	0.00	0.00	0.0
nteragency Contracts Between LEAs	8285	0.00	0.00	0.00	0.00	0.00	0.0
Pass-Through Revenues from Federal Sources	8287	0.00	0.00	0.00	0.00	0.00	0.0
Title I, Part A, Basic 3010	8290	267,685.00	267,685.00	0.00	267,685.00		
Title I, Part D, Local Delinquent	3230	201,000.00	207,000.00	0.00	201,000.00	0.00	0.0
Programs 3025	8290	0.00	0.00	0.00	0.00	0.00	0.0
Title II, Part A, Supporting Effective Instruction 4035	8290	38,271.00	38,271.00	85,328.00	38,271.00	0.00	0.0

#### 15 63552 0000000 Form 01I

Description	Resource Codes	Object Codes	Original Budget	Board Approved Operating Budget (B)	Actuals To Date (C)	Projected Year Totals (D)	Difference (Col B & D) (E)	% Diff (E/B) (F)
Title III, Part A, Immigrant Student								
Program	4201	8290	0.00	0.00	0.00	0.00	0.00	0.0
Title III, Part A, English Learner Program	4203	8290	16,244.00	16,244.00	32,974.00	16,244.00	0.00	0.0
Public Charter Schools Grant								
Program (PCSGP)	4610	8290	0.00	0.00	0.00	0.00	0.00	0.0
Other NO. B. (Fire a Student Support Act	3040, 3045, 3060, 3061, 3110, 3150, 3155, 3180, 3182, 4037, 4123, 4124, 4126, 4127, 4128,	0000						
Other NCLB / Every Student Succeeds Act	5630	8290	19,940.00	19,940.00	0.00	19,940.00	0.00	0.09
Career and Technical Education	3500-3599	8290	0.00	0.00	0.00	0.00	0.00	0.09
All Other Federal Revenue	All Other	8290	14,000.00	14,000.00	551,537.00	2,736,048.00	2,722,048.00	19443.29
TOTAL, FEDERAL REVENUE  OTHER STATE REVENUE			577,581.00	577,581.00	669,839.00	3,299,629.00	2,722,048.00	471.39
JINER OTATE REVENUE								
Other State Apportionments								
ROC/P Entitlement Prior Years	6360	8319	0.00	0.00	0.00	0.00	0.00	0.09
Special Education Master Plan								
Current Year	6500	8311	0.00	0.00	0.00	0.00	0.00	0.09
Prior Years	6500	8319	0.00	0.00	0.00	0.00	0.00	0.09
All Other State Apportionments - Current Year	All Other	8311	0.00	0.00	0.00	0.00	0.00	0.09
All Other State Apportionments - Prior Years	All Other	8319	0.00	0.00	0.00	0.00	0.00	0.09
Child Nutrition Programs		8520	0.00	0.00	0.00	0.00	0.00	0.09
Mandated Costs Reimbursements		8550	45,174.00	45,174.00	44,273.00	45,174.00	0.00	0.09
Lottery - Unrestricted and Instructional Materia		8560	274,161.00	274,161.00	187,253.12	327,462.00	53,301.00	19.49
Tax Relief Subventions Restricted Levies - Other								
Homeowners' Exemptions		8575	0.00	0.00	0.00	0.00	0.00	0.09
Other Subventions/In-Lieu Taxes		8576	0.00	0.00	0.00	0.00	0.00	0.09
Pass-Through Revenues from State Sources		8587	0.00	0.00	0.00	0.00	0.00	0.09
After School Education and Safety (ASES)	6010	8590	0.00	0.00	0.00	0.00	0.00	0.09
Charter School Facility Grant	6030	8590	0.00	0.00	0.00	0.00	0.00	0.09
Career Technical Education Incentive Grant Program	6387	8590	0.00	0.00	0.00	0.00	0.00	0.09
Drug/Alcohol/Tobacco Funds	6650, 6690, 6695	8590	0.00	0.00	0.00	0.00	0.00	0.09
California Clean Energy Jobs Act	6230	8590	0.00	0.00	0.00	0.00	0.00	0.0%
Specialized Secondary	7370	8590	0.00	0.00	0.00	0.00	0.00	0.09
American Indian Early Childhood Education	7210	8590	0.00	0.00	0.00	0.00	0.00	0.09
All Other State Revenue	All Other	8590	239,510.00	239,510.00	926,103.76	1,778,062.00	1,538,552.00	642.49
TOTAL, OTHER STATE REVENUE			558,845.00	558,845.00	1,157,629.88	2,150,698.00	1,591,853.00	284.89

Description	Resource Codes	Object Codes	Original Budget	Board Approved Operating Budget (B)	Actuals To Date (C)	Projected Year Totals (D)	Difference (Col B & D) (E)	% Diff (E/B) (F)
OTHER LOCAL REVENUE	Roodaldo dodes	oodes	(A)	(b)	(0)	(6)	(=)	(F)
Other Local Revenue								
County and District Taxes								
Other Restricted Levies Secured Roll		8615	0.00	0.00	0.00	0.00		
Unsecured Roll		8616	0.00	0.00	0.00	0.00	0.00	0.09
Prior Years' Taxes		8617	0.00	0.00	0.00		0.00	0.09
Supplemental Taxes		8618	0.00	0.00	0.00	0.00	0.00	0.09
Non-Ad Valorem Taxes		8018	0.00	0.00	0.00	0.00	0.00	0.0%
Parcel Taxes		8621	0.00	0.00	0.00	0.00	0.00	0.0%
Other		8622	0.00	0.00	0.00	0.00	0.00	0.0%
Community Redevelopment Funds							0.00	0.07
Not Subject to LCFF Deduction		8625	0.00	0.00	0.00	0.00	0.00	0.0%
Penalties and Interest from Delinquent No	n-LCFF							
Taxes		8629	0.00	0.00	0.00	0.00	0.00	0.0%
Sales Sale of Equipment/Supplies		8631	0.00	0.00	0.00	0.00	0.00	0.00
Sale of Publications		8632	0.00	0.00		0.00	0.00	0.0%
Food Service Sales		8634	0.00		0.00	0.00	0.00	0.0%
All Other Sales				0.00	0.00	0.00	0.00	0.0%
Leases and Rentals		8639	0.00	0.00	0.00	0.00	0.00	0.0%
Interest		8650	24,000.00	24,000.00	0.00	24,000.00	0.00	0.0%
		8660	15,000.00	15,000.00	14,440.48	15,000.00	0.00	0.0%
Net Increase (Decrease) in the Fair Value of	r investments	8662	0.00	0.00	0.00	0.00	0.00	0.0%
Fees and Contracts Adult Education Fees		8671	0.00	0.00	0.00	0.00	0.00	0.00
Non-Resident Students		8672	0.00	0.00	0.00	0.00	0.00	0.0%
Transportation Fees From Individuals		8675	0.00	0.00	0.00	0.00	0.00	0.0%
Interagency Services		8677	0.00	0.00	0.00	0.00	0.00	0.0%
Mitigation/Developer Fees		8681	0.00	0.00	0.00	0.00		0.0%
All Other Fees and Contracts		8689	0.00	0.00	0.00		0.00	0.0%
Other Local Revenue		0000	0.00	0.00	0.00	0.00	0.00	0.0%
Plus: Misc Funds Non-LCFF (50%) Adjustr	ment	8691	0.00	0.00	0.00	0.00	0.00	
Pass-Through Revenues From Local Source		8697	0.00	0.00	0.00	0.00	0.00	0.0%
All Other Local Revenue	ces			0.00	0.00	0.00	0.00	0.0%
Tuition		8699	148,508.00	148,508.00	13,939.85	148,508.00	0.00	0.0%
		8710	0.00	0.00	0.00	0.00	0.00	0.0%
All Other Transfers in		8781-8783	0.00	0.00	0.00	0.00	0.00	0.0%
Transfers Of Apportionments Special Education SELPA Transfers								
From Districts or Charter Schools	6500	8791	0.00	0.00	0.00	0.00	0.00	0.0%
From County Offices	6500	8792	652,575.00	652,575.00	435,738.00	652,575.00	0.00	0.0%
From JPAs	6500	8793	0.00	0.00	0.00	0.00	0.00	0.0%
ROC/P Transfers								
From Districts or Charter Schools	6360	8791	0.00	0.00	0.00	0.00	0.00	0.0%
From County Offices	6360	8792	0.00	0.00	0.00	0.00	0.00	0.0%
From JPAs	6360	8793	0.00	0.00	0.00	0.00	0.00	0.0%
Other Transfers of Apportionments From Districts or Charter Schools	All Other	8791	0.00	0.00	2.22	2.22		
From County Offices	All Other	8792	0.00	0.00	0.00	0.00	0.00	0.0%
From JPAs	All Other		0.00	0.00	0.00	0.00	0.00	0.0%
	All Olifer	8793	0.00	0.00	0.00	0.00	0.00	0.0%
All Other Transfers In from All Others		8799	0.00	0.00	0.00	0.00	0.00	0.0%
TOTAL, OTHER LOCAL REVENUE			840,083.00	840,083.00	464,118.33	840,083.00	0.00	0.0%
			15,918,175.00					

Description Resource Codes	Object Codes	Original Budget	Board Approved Operating Budget (B)	Actuals To Date (C)	Projected Year Totals (D)	Difference (Col B & D) (E)	% Diff (E/B) (F)
CERTIFICATED SALARIES		V 4	(-/	(0)	(0)	(-)	<u> </u>
Certificated Teachers' Salaries	1100	4,824,385.00	4,824,385.00	2,601,076.14	5,351,838.00	(527,453,00)	-10.9
Certificated Pupil Support Salaries	1200	543,752.00	543,752.00	366,982.79	601,841.00	(58,089.00)	-10.7
Certificated Supervisors' and Administrators' Salaries	1300	692,892.00	692,892.00	366,940.73	712,892.00	(20,000,00)	-2.9
Other Certificated Salaries	1900	0.00	0.00	0.00	0.00	0.00	0.0
TOTAL, CERTIFICATED SALARIES		6,061,029.00	6,061,029.00	3,334,999.66	6,666,571.00	(605,542.00)	-10.0
CLASSIFIED SALARIES						(,,	
Classified Instructional Salaries	2100	920,638.00	920,638.00	403,087.57	1,022,154.00	(101,516.00)	-11.0
Classified Support Salaries	2200	569,173.00	569,173.00	415,129.93	591,173.00	(22,000.00)	-3.9
Classified Supervisors' and Administrators' Salaries	2300	75,429.00	75,429.00	48,235.86	82,420.00	(6,991.00)	-9.3
Clerical, Technical and Office Salaries	2400	295,886.00	295,886.00	165,805.96	339,888.00	(44,002.00)	-14.9
Other Classified Salaries	2900	56,582.00	56,582.00	35,136.85	58,683.00	(2,101.00)	-3.7
TOTAL, CLASSIFIED SALARIES		1,917,708.00	1,917,708.00	1,067,396.17	2.094,318.00	(176,610.00)	-9.2
EMPLOYEE BENEFITS							
STRS	3101-3102	1,034,368.00	1,034,368.00	550,248.01	889,284.00	145,084.00	14.0
PERS	3201-3202	434,240.00	434,240.00	212,952.18	460,385.00	(26,145.00)	-6.0
OASDI/Medicare/Alternative	3301-3302	231,944.00	231,944.00	123,759.08	269,106.00	(37,162.00)	-16.0
Health and Welfare Benefits	3401-3402	2,147,525.00	2,147,525.00	1,086,137.31	2,529,422.00	(381,897.00)	-17.8
Unemployment insurance	3501-3502	6,721.00	6,721.00	21,844.19	16,676.00	(9,955.00)	-148.1
Workers' Compensation	3601-3602	248,116.00	248,116.00	84,668.58	371,059.00	(122,943.00)	-49.6
OPEB, Allocated	3701-3702	157,550.00	157,550.00	79,265.76	157,550.00	0.00	0.0
OPEB, Active Employees	3751-3752	0.00	0.00	0.00	0.00	0.00	0.0
Other Employee Benefits	3901-3902	0.00	0.00	0.00	0.00	0.00	0.0
TOTAL, EMPLOYEE BENEFITS		4,260,464.00	4,260,464.00	2,158,875.11	4,693,482.00	(433,018.00)	-10.2
BOOKS AND SUPPLIES							
Approved Textbooks and Core Curricula Materials	4100	0.00	0.00	9,679.46	10,000.00	(10,000.00)	Ne
Books and Other Reference Materials	4200	117,507.00	117,507.00	13,015.60	139,507.00	(22,000.00)	-18.7
Materials and Supplies	4300	338,807.00	338,807.00	270,013.07	2,138,239.00	(1,799,432.00)	-531.1
Noncapitalized Equipment	4400	0.00	0.00	365,850.70	400,000.00	(400,000.00)	Ne
Food	4700	0.00	0.00	0.00	0.00	0.00	0.0
TOTAL, BOOKS AND SUPPLIES		456,314.00	456,314.00	658,558.83	2,687,746.00	(2,231,432.00)	-489.0
SERVICES AND OTHER OPERATING EXPENDITURES							
Subagreements for Services	5100	0.00	0.00	0.00	0.00	0.00	0.0
Travel and Conferences	5200	0.00	0.00	4,173.32	120,000.00	(120,000.00)	Ne
Dues and Memberships	5300	25,300.00	25,300.00	13,740.00	25,300.00	0.00	0.0
Insurance	5400-5450	215,000.00	215,000.00	135,462.74	215,000.00	0.00	0.0
Operations and Housekeeping Services	5500	259,297.00	259,297.00	191,231.65	452,044.00	(192,747.00)	-74.3
Rentals, Leases, Repairs, and Noncapitalized Improvements	5600	156,500.00	156,500.00	157,957.71	270,000.00	(113,500.00)	-72.5
Transfers of Direct Costs	5710	0.00	0.00	0.00	0.00	0.00	0.0
Transfers of Direct Costs - Interfund	5750	0.00	0.00	0.00	0.00	0.00	0.0
Professional/Consulting Services and	FOOD	E70 007 00	E79 007 00	007.000.40	4 457 000 00	/570 077	
Operating Expenditures Communications	5800	578,027.00	578,027.00	237,056.19	1,157,299.00	(579,272.00)	-100.2
	5900	55,650.00	55,650.00	15,092.73	175,650.00	(120,000.00)	-215.6
TOTAL, SERVICES AND OTHER OPERATING EXPENDITURES		1,289,774.00	1,289,774.00	754,714.34	2,415,293.00	(1,125,519.00)	-87.3

Description R	Resource Codes	Object Codes	Original Budget (A)	Board Approved Operating Budget (B)	Actuals To Date (C)	Projected Year Totals (D)	Difference (Col B & D) (E)	% Diff (E/B)
CAPITAL OUTLAY	COOLICE COULS	Oodes	\^1	(6)	(0)	(6)	(E)	(F)
Land		6100	0.00	0.00	0.00	0.00	0.00	0.0
Land Improvements		6170	0.00	0.00	0.00	0.00	0.00	0.0
Buildings and Improvements of Buildings		6200	0.00	0.00	0.00	0.00	0.00	0.0
Books and Media for New School Libraries								
or Major Expansion of School Libraries		6300	0.00	0.00	0.00	0.00	0.00	0.0
Equipment		6400	0.00	0.00	0.00	226,992.00	(226,992.00)	N
Equipment Replacement		6500	0.00	0.00	0.00	0.00	0.00	0.
Lease Assets		6600	0.00	0.00	0.00	0.00	0.00	0.0
TOTAL, CAPITAL OUTLAY			0.00	0.00	0.00	226,992.00	(226,992.00)	N
OTHER OUTGO (excluding Transfers of Indirect	Costs)							
Tuition								
Tuition Tuition for Instruction Under Interdistrict								
Attendance Agreements		7110	0.00	0.00	0.00	0.00	0.00	0.0
State Special Schools		7130	0.00	0.00	0.00	0.00	0.00	0.
Tuition, Excess Costs, and/or Deficit Payments		74.4						
Payments to Districts or Charter Schools		7141	0.00	0.00	0.00	0.00	0.00	0.0
Payments to County Offices		7142	1,916,264.00	1,916,264.00	1,874,682.75	1,916,264.00	0.00	0.0
Payments to JPAs		7143	0.00	0.00	0.00	0.00	0.00	0.
Transfers of Pass-Through Revenues To Districts or Charter Schools		7211	0.00	0.00	0.00	0.00	0.00	0.0
To County Offices		7212	0.00	0.00	0.00	0.00	0.00	0.0
To JPAs		7213	0.00	0.00	0.00	0.00	0.00	0.0
Special Education SELPA Transfers of Apportion	ments							
To Districts or Charter Schools	6500	7221	0.00	0.00	0.00	0.00	0.00	0.0
To County Offices	6500	7222	0.00	0.00	0.00	0.00	0.00	0.0
To JPAs	6500	7223	0.00	0.00	0.00	0.00	0.00	0.0
ROC/P Transfers of Apportionments To Districts or Charter Schools	6360	7224	0.00	0.00				
To County Offices	6360	7221	0.00	0.00	0.00	0.00	0.00	0.0
To JPAs	6360 6360	7222	0.00	0.00	0.00	0.00	0.00	0.0
		7223 7221-7223	0.00	0.00	0.00	0.00	0.00	0.0
Other Transfers of Apportionments  All Other Transfers	All Other		0.00	0.00	0.00	0.00	0.00	0.0
All Other Transfers Out to All Others		7281-7283	0.00	0.00	0.00	0.00	0.00	0.0
Debt Service		7299	0.00	0.00	0.00	0.00	0.00	0.0
Debt Service - Interest		7438	0.00	0.00	0.00	0.00	0.00	0.0
Other Debt Service - Principal		7439	0.00	0.00	0.00	0.00	0.00	0.0
TOTAL, OTHER OUTGO (excluding Transfers of Ir	ndirect Costs)		1,916,264.00	1,916,264.00	1,874,682.75	1,916,264.00	0.00	0.0
THER OUTGO - TRANSFERS OF INDIRECT CO	STS							
Transfers of Indirect Costs		7240	0.55					
		7310	0.00	0.00	0.00	0.00		
Transfers of Indirect Costs - Interfund	DECT COSTS	7350	0.00	0.00	0.00	0.00	0.00	0,0
TOTAL, OTHER OUTGO - TRANSFERS OF INDIF	KEUT COSTS		0.00	0.00	0.00	0.00	0.00	0.0
OTAL, EXPENDITURES			15,901,553.00	15,901,553.00	9,849,226.86	20,700,666.00	(4,799,113.00)	-30.2

#### 15 **63552** 0000000 Form 01!

Description R		Object Codes	Original Budget	Board Approved Operating Budget (B)	Actuals To Date	Projected Year Totals (D)	Difference (Col B & D) (E)	% Diff (E/B) (F)
INTERFUND TRANSFERS				,=,		(0)		
INTERFUND TRANSFERS IN								
From: Special Reserve Fund		8912	0.00	0.00	0.00	0.00	0.00	0.0%
From: Bond Interest and								
Redemption Fund	8	8914	0.00	0.00	0.00	0.00	0.00	0.09
Other Authorized Interfund Transfers In	8	8919	0.00	0.00	0.00	0.00	0.00	0.09
(a) TOTAL, INTERFUND TRANSFERS IN			0.00	0.00	0.00	0.00	0.00	0.0%
INTERFUND TRANSFERS OUT								
To: Child Development Fund		7611	0.00	0.00	0.00	0.00	0.00	0.0%
To: Special Reserve Fund	7	7612	0.00	0.00	0.00	0.00	0.00	0.0%
To: State School Building Fund/							3.30	- 0.07
County School Facilities Fund	- 7	7613	0.00	0.00	0.00	0.00	0.00	0.0%
To: Cafeteria Fund	7	7616	0.00	0.00	0.00	0.00	0.00	0.0%
Other Authorized Interfund Transfers Out	7	7619	0.00	0.00	0.00	0.00	0.00	0.0%
(b) TOTAL, INTERFUND TRANSFERS OUT			0.00	0.00	0.00	0.00	0.00	0.0%
OTHER SOURCES/USES					1			
SOURCES								
State Apportionments Emergency Apportionments	s	3931	0.00	0.00	0.00	0.00	2.22	
Proceeds	•	3001	0.00	0.00	0.00	0.00	0.00	0.0%
Proceeds from Disposal of								
Capital Assets	8	3953	0.00	0.00	0.00	0.00	0.00	0.0%
Other Sources								
Transfers from Funds of					5			
Lapsed/Reorganized LEAs	8	3965	0.00	0.00	0.00	0.00	0.00	0.0%
Long-Term Debt Proceeds Proceeds from Certificates								
of Participation	8	3971	0.00	0.00	0.00	0.00	0.00	0.0%
Proceeds from Leases	8	3972	0.00	0.00	0.00	0.00	0.00	0.0%
Proceeds from Lease Revenue Bonds	8	3973	0.00	0.00	0.00	0.00	0.00	0.0%
All Other Financing Sources	8	979	0.00	0.00	0.00	0.00	0.00	0.0%
(c) TOTAL, SOURCES			0.00	0.00	0.00	0.00	0.00	0.0%
USES				Y				
Transfers of Funds from								
Lapsed/Reorganized LEAs	7	651	0.00	0.00	0.00	0.00	0.00	0.0%
All Other Financing Uses	7	699	0.00	0.00	0.00	0.00	0.00	0.0%
(d) TOTAL, USES			0.00	0.00	0.00	0.00	0.00	0.0%
CONTRIBUTIONS						49.5		
Contributions from Unrestricted Revenues	8	980	0.00	0.00	0.00	0.00		
Contributions from Restricted Revenues	8:	990	0.00	0.00	0.00	0.00		
(e) TOTAL, CONTRIBUTIONS			0.00	0.00	0.00	0.00	0.00	0.0%
OTAL, OTHER FINANCING SOURCES/USES								
(a - b + c - d + e)			0.00	0.00	0.00	0.00	0.00	0.0%

### OFFICE OF MARY C. BARLOW KERN COUNTY SUPERINTENDENT OF SCHOOLS Advocates for Children

# AGREEMENT BETWEEN KERN COUNTY SUPERINTENDENT OF SCHOOLS DIVISION OF SPECIAL EDUCATION AND KERN COUNTY CONSORTIUM SELPA PARTICIPATING DISTRICTS

#### Recitals

- A. Lakeside Union School District (hereinafter referred to as SCHOOL DISTRICT) is required by law to provide special education services to eligible district pupils and to be a member of a Special Education Local Plan Agency. Pursuant to law, SCHOOL DISTRICT is a participating district in the Kern County Consortium for Special Education (SELPA).
- B. The KERN COUNTY SUPERINTENDENT OF SCHOOLS (KCSOS) is a member of the SELPA and has been designated as the Administrative Unit under the Local Plan. As a SELPA participant, KCSOS provides administrative support to the SELPA. The specific KCSOS Division of Special Education agrees to provide special education services to SELPA member district pupils.
- C. The purpose of this Agreement is to delineate the functions and responsibilities of the SCHOOL DISTRICT and KCSOS when the KCSOS Division of Special Education is a provider of special education services to SCHOOL DISTRICT's pupils.

#### **Terms**

By their authorized signatures, below, the parties mutually agree as follows:

- 1. The initial term of this Agreement is **July 1, 2021 through June 30, 2022**. This Agreement shall renew annually as long as SCHOOL DISTRICT (the District) and KCSOS are participants in the SELPA and provided that this Agreement is consistent with the SELPA's Local Plan.
- 2. KCSOS Division of Special Education agrees to conduct special education programs and classes as determined by the SELPA's Superintendents' Executive Council (SEC), for pupils legally eligible for those programs and services. Services will be consistent with each pupil's Individualized Education Program. Related services may also be provided by KCSOS when identified in the IEP.
- 3. AB 602 Funding: Funding for participating members of the SELPA shall be determined by the SELPA's Superintendent's Executive Council (SEC) and set forth in the SELPA's Allocation Plan. In the event that the SEC revises the Allocation Plan during the term of this Agreement, such revisions shall be automatically incorporated into this Agreement and bind all participating SELPA members. Notice is not required.

4. Part C to Part B Available Assessment Services: Should a District's pupil who is transitioning out of the Early Start (Part C) program require a Part C to Part B assessment and the District wishes to use the Assessment and Support Team available through KCSOS Division of Special Education, the District shall refer the pupil through the SELPA's Search and Serve Process – See Appendix B for details of the Part C to Part B Procedure.

#### 5. Funding

#### A. ADA Revenue

The SELPA's SEC has determined that for the 21/22 school year, Districts will be receiving all of the ADA revenue generated by "District" students educated in the KCSOS Special Education Programs. (There is no Revenue Limit Transfer to KCSOS in existence with the LCFF model.)

#### B. Program Allowance and Reimbursement

The District agrees to pay KCSOS on a "straight bill back" per pupil basis for programs and services provided to District's pupils by the Division of Special Education. Cost per pupil to the District shall be computed according to the formula set forth in Appendix A – Program. This amount is due and payable in 10 equal transfers, beginning in September of each year.

#### C. Special Circumstances

If an IEP Team specifies additional and/or extraordinary services for a pupil covered by this Agreement, and if these services require an expenditure of funds significantly greater than normally required by other students in the program provided by KCSOS's Division of Special Education, a separate agreement between KCSOS and the District shall be drawn accordingly within ten (10) working days of the IEP Team meeting.

#### D. Part C to Part B Assessment Funding

The SELPA's SEC has determined that for the 21/22 school year, Districts will pay the KCSOS Division of Special Education \$4,250.00 per Part C to Part B assessment.

A District will receive an invoice in July, **2022** for the number of assessments that have been completed for their specific District.

#### E. Coordination of Curriculum

The parties agree that it is in the best interests of the pupils served under this Agreement to provide a coordinated system of curriculum development, implementation and monitoring, and they agree to cooperate in this regard.

ACCEPTED:	
Date of Board Approval:	
LAKESIDE UNION SCHOOL DISTRICT	MARY C. BARLOW KERN COUNTY SUPERINTENDENT OF SCHOOLS
BySignatory Name: Ty Bryson Title: District Superintendent Address: 14535 Old River Blvd Bakersfield, CA 93311	By Signatory Name: Tina Foster Title: Chief Financial Operations Officer Address: 1300 17th Street, Bakersfield, CA 93301 Acct Code: 02-400-6500-0-8710.00-5001-0000-000000000000000000000000
Date:	Date: 6-17-11

#### APPENDIX A - PROGRAM

The Kern County Superintendent of Schools (KCSOS) Division of Special Education's final billing costs shall reflect two separate program expenditure calculations representing the following programs and services:

- A. Special Day Class Severely Disabled/Low Incidence,
- B. Designated Instructional Services.

The final calculated net expenditure amount for each of the two program services shall be divided by the average of the total KCSOS Division of Special Education's pupil enrollment in these program services for the year. This produces a dollar cost per student for each of the two programs and services.

The dollar cost per student for each of the **programs** and services shall be multiplied by the number of students enrolled from each school district. The total cost per school district will be the sum of the program and service(s) costs (A & B above).

By May 31st of the preceding year, the KCSOS Division of Special Education will provide to each school district an estimate of the following year's program and service costs, which can be used for district budgeting purposes. These estimates will be the basis for the preliminary transfers from the district and will reflect the following:

- KCSOS Division of Special Education's budget for the bill back year
- District enrollment, which will be based on the preceding March 31<sup>st</sup> count with the following adjustments:
  - 1. anticipated program transfer
  - 2. exiting 8<sup>th</sup> grade students
  - 3. students matriculating into existing district programs
  - 4. KCSOS estimate of entering kindergarteners.

After fiscal year end, a calculation of the final bill back amounts will be made using the net expenditures for the year and the final student participation counts. Final student participation counts reflect the average of the four-times-a-year student verification process; these verifications are based on quarters ending September, December, March and June. This final amount will be compared to each district's estimated amount transferred, and a correcting transfer will then be made to/from each district. This correction will be made as soon as possible after the closing of the KCSOS' books at each year end.

#### APPENDIX B - PART C TO PART B ASSESSMENTS

Should a District's pupil who is transitioning out of the Early Start (Part C) Program require a Part C to Part B assessment and the District wishes to use the Assessment and Support Team available through KCSOS Division of Special Education, the District shall refer the pupil through the SELPA's Search and Serve Process.

KCSOS Division of Special Education agrees to conduct Part C to Part B assessments using the appropriate personnel based on a pupil's suspected disability as noted in the referral. Assessments will be completed within the State-mandated timeline prior to the pupil's third birthday should the referral be received at least two (2) months prior to the birthday. Referrals received after that time will be approached on a case-by-case basis.

District Personnel will be responsible for facilitating the Individualized Education Program (LE.P.) meetings held as the result of the Part C to Part B assessments. KCSOS Assessment and Support Team personnel will complete the paperwork appropriate to their portion of the Present Levels of Performance, any Proposed Goals & Objectives, any Accommodations/Modifications, and any other needs for an individual pupil. Should District Personnel not be available for the LE.P., arrangements will be made in advance to insure the proper operation of the meeting and that the District's services are appropriately documented.

The KCSOS Director responsible for the Assessment and Support Team shall document referrals based on the District of Residence. A running total will be available to Districts throughout the school year.

### **REQUEST FOR PROPOSAL**

#### 0023-22C.1 Lakeside Union School District Network Electronics

#### LAKESIDE UNION SCHOOL DISTRICT

14535 OLD RIVER RD. BAKERSFIELD, CA. 93311

#### **OWNER'S REPRESENTATIVE:**



PO Box 999 • Bakersfield, Ca. • 93302 Phone: 661.716.1840 • Fax: 661.716.1841 www.infinitycomm.com

> Published Date: January 26, 2022

0023-22C.1

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#### **BID INTRODUCTION**

Lakeside Union School District, here after referred to as Owner or District, is seeking proposal from qualified Bidders to furnish specialized technology equipment. The Owner and their governing board have determined that it is in the best interest of the Owner to procure these goods and services through the competitive negotiations process, pursuant to Public Contract Code Section 20118.2. The Owner intends to award a contract for equipment to the qualified bidders whose proposal is the most advantageous to the school district.

Any and all updated project information, forms, including addenda, will be distributed thru the project website, located at <a href="https://www.infinitycomm.com/projects">https://www.infinitycomm.com/projects</a> & <a href="https://www.infinitycomm.com/projects">https://www.infinitycomm.com/projects</a> & <a href="https://portal.usac.org/suite/">https://portal.usac.org/suite/</a>. All of these documents shall be made part of and material to the contract for services. The Owner expects that the bidder include all project information, including addenda in their proposed bid price. Failure of the bidder to include all addenda in their bid will result in the Owner rejecting their bid.

All bidders interested in providing a proposal for this project must deliver their proposal in a sealed envelope to 4909 Calloway Drive, Bakersfield, CA 93312, no later than February 25, 2022 by 11:00AM. Bids received after the due date or other locations will not be accepted. Digital bids will be received by emailing p2bids@infinitycomm.com before the date and time listed.

All inquiries concerning the project should be directed to the Owner's Representative. All request for

Attention: John Cleveland Infinity Communications and Consulting, Inc., 4909 Calloway Dr.
Bakersfield, Ca. 93312 (661) 716-1840 Phone (661) 761-1841 Fax p2bids@infinitycomm.com

#### Instructions to Bidders

### READ THIS DOCUMENT CAREFULLY. DO NOT ASSUME THAT IT IS THE SAME AS OTHER SIMILAR DOCUMENTS YOU MAY HAVE SEEN, EVEN IF FROM THE SAME OWNER.

#### PREPARATION OF BID FORMS

The Bidder's price shall be submitted on the prescribed Proposal Form, completed in full. All bid items and statements shall be properly and legibly filled out. Numbers shall be stated both in words and in figures as so indicated, and where there is a conflict in the words and the figures, the words shall govern. The signatures of all persons shall be in longhand. Prices, wording, and notations must be in ink or typewritten. Erasures or other changes shall be noted over by signature of the bidder.

When submitting a digital bid response, the bidder is responsible to ensure that all documents are legible. Submitting documents that fail to be legible, will not be review and will result in the resolution that the bid is non-responsive.

#### FORM AND DELIVERY OF BIDS

The bid must conform and be responsive to all Project documents and shall be made on the Proposal Form provided, and the complete bid, together with any and all additional materials as required, shall be enclosed in a sealed envelope, addressed and hand delivered or mailed to the location specified in the "Bid Introduction" section above. The envelope shall be plainly marked in the upper left-hand corner with the bidder's name, the Project designation and the date and time for the opening of bids. It is the bidder's sole responsibility to ensure that its bid is received prior to the bid deadline.

Digital bid responses are an acceptable form of bid. Digital bid responses must be emailed to <a href="mailto:p2bids@infinitycomm.com">p2bids@infinitycomm.com</a>. Receipt to any email other than this email will not be accepted as a bid response. Bids must be received by email before the time listed in the RFP.

#### PROPOSAL REQUIREMENTS

Bidder shall supply one electronic and one soft copy of their complete bid package in the proposal submission. Proposals shall include the following:

- 1. **Proposal Narrative** The bidder will include with their proposal a written narrative, detailing the means and methods, the bidder intends to employ to perform the services requested in this RFP. The Proposal Narrative shall not exceed 10 pages (page limit excludes RFP Forms and Electronic Item 21 Attachment Sheets). The proposal narrative shall include at a minimum:
  - a. A brief description of the bidder, and their relevant history in the marketplace.
  - b. A statement, if applicable, that clearly address any conflict or inability on the part of the bidder to meet the system(s) and/or terms and conditions specified in this document.
- Proposal Form The bidder shall provide their price on the provided "Proposal Form". If the bidder wishes to propose "Alternate" pricing and/or product options, they may do so only in addition to supplying a "Proposal Form" for the requested service. A brief description and scope of the Base Bid & Additive Alternates are supplied below:

#### Base Bid

The Base Bid Price shall **include** <u>all material</u> and <u>sales tax</u> to complete the work described in this RFP and the associated Design Documents.

 Electronic Item 21 Attachment Sheet – The bidder shall provide itemized pricing for all equipment to be included in this Bid Response. Pricing shall include E-Rate eligibility, materials, tax, shipping, and any other associated charges. This will be provided in the included spreadsheet format.

Due to filing requirements, an electronic copy will be required at the time of bid.

When submitting a paper bid, all digital files must be submitted on a portable flash drive (thumb drive). Files will be returned in the same format as the published Item 21, no exceptions. Failing to comply with these requirements will be considered for bid dismissal.

- 4. **Substitution Listing** The Bidder may, if they so choose, propose to "substitute " product that they deem "equal" or "better" to the specified products that was not "Pre-Approved" prior to the Bid Date. Contractor shall list the approved product(s) with the corresponding proposed substituted product(s). The Bidder shall bear the sole responsibility to provide the supporting documentation to validate their claim that the proposed substituted items are equal or exceeds the specified products.
- 5. **Noncollusion Affidavit** In accordance with the provisions of Section 7106 of the Public Contract Code, bid must be accompanied by a noncollusion affidavit. Bidder shall submit a notarized copy of the form with their bid response.
- Certificate of Attendance at Mandatory Pre-Bid Meeting The bidder shall complete the form and include a copy in their bid
  response.
- 7. **Bidder's Qualifications Form** The bidder shall complete and submit the attached "Qualifications Form" as a part of their proposal. Bidder shall also include a minimum of <a href="three">three</a> (3) references that demonstrate their ability to provide the services requested in this RFP. References will include Contact Name, Organization Name, Telephone, and email information for Contact.
- 8. **Manufacture's Certification Form** Bidders shall include in the bid response the certification applicable to the scope of work they are bidding; Bidder shall include a copy of the certification from the manufacture with their bid.
- 9. **Bidder Agreement** The bidder will include two (2) signed and dated copies of the attached Contractor Agreement with their bid proposal. Once all proposals have been received, and evaluated, the District will sign, date, and return the successful bidder's agreement(s).

#### **GENERAL INFORMATION**

#### E-RATE PROGRAM REQUIREMENTS

This project will depend on partial funding from the Schools and Libraries Division's E-Rate program. The Owner expects each Bidder to make themselves intimately familiar with any rules or regulations regarding the E-Rate program. Any contracts entered into as a result of the posting of the Form 470/RFP will be contingent upon the approval of discounts from the Universal Services Administrative Company (USAC) and the Owner's acceptance of said discounts.

The Bidder shall be responsible to invoice and collect payment of the discounted contract amount from USAC, utilizing the SPI method. The undiscounted contract amount will be the maximum amount that the OWNER is liable. Bidder agrees to provide the Owner a copy of their USAC invoice to verify that the material has been delivered and accepted by the Owner before Bidder bills USAC.

In compliance with the E-Rate program rules, Bidder agrees that no services can be delivered prior to April 1, 2022. The Bidder is responsible for providing a valid SPIN number with their proposal(s) showing that they are in good standing with USAC.

#### BIDDER REQUIREMENTS

Prospective bidders must be able to provide a portfolio describing experience with comparable projects in the K-12 customer market. Bidders must meet the following qualifications in order to be considered:

- 10. Bidder must have a USAC Service Provider Identification Number (SPIN)
- 11. Bidder must hold the required Manufacture Certifications for the Products/Systems proposed in their bid.
- 12. Bidder shall provide educational discount pricing or better.
- 13. Bidder must be able to warranty the equipment for a period of one year plus agree to extend any/all manufacturer warranties at no additional cost to the Owner.
  - a. Vendor shall work with manufactures to establish the manufactures warranty period, starting at the time of delivery or notice of completion (as agreed upon by the District).
- 14. Bidder must provide all components and parts of the system(s) broken out in the bid and unit pricing for each component, on the Form 471 Block 5 Item 21 attachment sheet.

#### REQUEST FOR INFORMATION (RFI)

All inquiries and/or questions regarding the proposal shall be submitted in writing to the Owner's Representative. All response to prospective bidder's requests for information will be issued in written form. All RFI's must be received no later than **five (5) calendar days (24-hour periods)** before the opening of the bids. Any RFI's received after the **five (5) days** will not be answered. All RFI's are to be submitted to the contact person and email listed in the **Bid Introduction**.

#### **EQUIVALENT PRODUCTS**

All approved Products/Systems, hereafter referred to as "Items", are described and provided in "Scope of Work" and associated project documents.

All other items other than those specifically addressed in the RFP document that the Bidder is seeking pre-approval for must be sent to the Owner's Representative for review. All requests for pre-approval must be received by the Owner's Representative no later than ten (10) calendar days before the bid date. Requests received after the deadline will not be considered.

Bidders wishing to submit Items for pre-approval will be required to perform the following:

- 1. Provide specifications and cut sheets for the proposed item.
- Provide an itemized comparison to each of the Item's functions in comparison to the approved Item. Include in that document how
  the proposed Item compares to the approved Item described in this document on a line by line basis, using one of the following
  three criteria: "exceeds" / "matches" / "unequal".

Provide a spreadsheet that cross-references the proposed new Part Number and Description to its corresponding specified the approved Part Number and Description.

Any new Approved Equals will be published in addendum form prior to the bid date. All proposals received that do not comply with the entire scope of work described in said documents, will be considered incomplete and the Owner reserves the right to list the Contractor's Proposal as non-responsive.

Failure to receive written approval for products installed that deviates from the products called for in this specification and/or on the project documents will result in the contractor replacing the unapproved materials and equipment with the originally specified products <u>at no</u> additional cost to the Owner.

#### SUBSTITUTIONS

The bidder may bid products or systems, hereafter referred to as "Items", which are "equivalent" or better to the Items approved in the Project documents. If the bidder chooses to bid an "equivalent" item, without seeking pre-approval, the bidder shall submit all pertinent and appropriate data substantiating its request for substitutions in their bid response using the "Substitution Listing" form. Documentation received after the bid date and time will not be accepted.

The OWNER is not responsible for locating or securing any information that is not included in such substantiating data. The burden of proof as to demonstrating the quality or suitability of proposed "equivalent" items shall be borne by the bidder. The OWNER shall be the sole judge as to the quality and suitability of proposed "equivalent" items, and decisions of the OWNER shall be final and conclusive. All such decisions by the OWNER shall be in writing, and no proposed "equivalent" item shall be deemed approved unless the OWNER has so indicated in writing.

#### **BID EVALUATION PROCESS**

The Owner will evaluate and select the winning bid based on the following criteria:

- 1. <u>Price (50%)</u> Price will be the highest weighted factor. Price will be evaluated on the sum total of the Base Bid and all Additive Alternates. Contingency Fees will not be included in the low bid evaluation.
- 2. Experience & Qualifications (30%) The Owner will evaluate the Bidder's ability to demonstrate their experience in the industry and performance on projects similar to their proposed system as well as demonstrate their technical qualifications and system certifications necessary for the successful completion of their proposed system.
- Accuracy of Bid or Bid Response (20%) The Owner will evaluate the bid response for completeness and adherence of the bidder to the requirements of the RFP. Amendments, exceptions, and alterations of the specified systems and of project documents will be evaluated and weighed on their merits. Owner reserves the right to reject any/all bids that do not meet the requirements set forth in this document.

#### BID PROTEST PROCEDURE

Bidder's wishing to file a formal protest must adhere to the Lakeside Union School District procedures which can be found at <a href="https://www.lakesideusd.org">www.lakesideusd.org</a>.

#### CONTRACT ADMINISTRATION

The contractual agreement shall be between the Owner and the winning Bidder. The acceptable agreement has been prepared by the Owner's Representative and has been included in the Request for Proposal (RFP). Bidders will sign the provided agreement and provide (2) two original signed copies with their bid proposal. The Owner shall return to the bidder with the highest ranked evaluated bid one (1) fully executed original copy of the agreement. Owner will return all bid securities and unsigned agreements back to the unsuccessful bidders.

#### RIGHT TO TERMINATE

The OWNER reserves the right to cancel this Project and terminate this Contract at any time prior to the issuance of a Notice to Proceed. If OWNER exercises its cancellation/termination rights as set forth herein prior to the issuance of a Notice to Proceed, OWNER shall have no liability to Contractor for any bid preparation or any other costs which may be incurred by the Contractor prior to cancellation of the Contract.

#### PROJECT SCHEDULE

The following are the anticipated project milestones:

First Publication Second Publication Week of January 31, 2022 Week of February 7, 2022 February 25, 2022, 11:00AM

Bid Date Notice of Intent to Award

TBD

Award of Contract

TBD

Anticipated Notice to Proceed

July 1, 2022 (dependent on E-Rate funding)

#### RIGHT TO REJECT ANY AND ALL QUOTES

The Owner reserves the right to reject any or all bid proposals and to waive any informalities or irregularities. The vendor's submission of a proposal is recognition of this right.

In addition, the Owner reserves the right to fund, or not to fund this project, regardless of E-Rate approval.

#### 01 - PROPOSAL FORM

PROJECT: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

LAKESIDE UNION SCHOOL DISTRICT

#### BASE BID - 0023-22C.1 Lakeside Union School District Network Electronics

The Bidder agrees to perform all work noted above, as described in the RFP and Project Documents for the lump sum of:

\_\_\_\_\_\_Dollars (\$\_\_\_\_\_\_)

(Amount Shall Be Shown in Both Words and Figures. In Case of a Discrepancy, The Amount Shown In Words Will Govern).

Bidder shall breakout the above Base Bid cost by Site for E-Rate Program funding allocation purposes:

**Project will be awarded based on the evaluation criteria set forth herein.** Price will be evaluated based on the sum total of the Base Bid, Basic Maintenance, and all Additive Alternates.

The bidder agrees that upon receipt of Owner's "Notice to Proceed", he/she will provide all required documents within ten (10) calendar days after the documents are presented for execution.

The bidder has carefully examined the RFP documents and specifications for this project that were prepared and furnished by the OWNER and acknowledges their sufficiency.

It is understood and agreed that the work under the contract shall be commenced by the bidder, if awarded the contract, on the date to be stated in the OWNER'S **Notice to Proceed**.

NAME OF BIDDER:			
PARTNERS OR LEGAL NAME OF CORPORATION			
	(TYPE OR PRINT)		*
AUTHORIZED CONTACT / BI REPRESENTATIVE:	D PREPARER / SALES		
BUSINESS ADDRESS:			
	(TYPE OR PRINT)		
TELEPHONE:		EMAIL:	
BY:		·	
(SIGNATURE IN INK)		(TYPE OR PRINT NAME OF TIT	LE AND SIGNATURE)
'I declare, under penalty of pe declaration was executed on _	rjury, that the information provide	ed, and representations made in (date) at	this bid are true and current and that this _, California."
PRESIDENT OF CORPORATION:			
(S	ignature in ink)		DATE
(1	YPE OR PRINT NAME AND TITLE OF SIG	NATURE)	
SECRETARY OF CORPORATION:			
	ignature in ink)		DATE
(T	YPE OR PRINT NAME AND TITLE OF SIG	NATURE)	<del></del>
CALIFORNIA S' CONTRACTOR'S LICENSE NO	TATE .:	FEDERAL I.D. NO:	-
LICENSE EXPIRATION DATE:	2 <del></del>	-	
TYPE OF LICENSE:	7	=	
PUBLIC WORKS CONTRAC REGISTRATION NO:	rtor's		
LICENSE IN THE NAME OF:	2.		
	(TYPE OR PRINT NAME)		

CORPORATE SEAL: (IF APPLICABLE)

#### 03 - ELECTRONIC ITEM 21 ATTACHMENT SHEET

Bidder shall provide itemized pricing for all equipment to be included in this Bid Response.

Due to filing requirements, an electronic copy will be required at the time of bid.

Acceptable formats: thumb drive, and digital copy. Files will be returned in the same format as the published Item 21, no exceptions. Failing to comply with these requirements will be considered for bid dismissal.

Bidder shall include a Description, Part Number, Quantity and Price for each relevant item included in their bid. Bidder shall provide the Labor cost as a line item.

Provided by the "Service Provider"

### 04 - SUBSTITUTION LISTING

PROJECT: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

TO: Lakeside Union School District ("OWNER")

Pursuant to bidding and contract requirements for the work titled:
 Project: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

The contract sum, proposed by the undersigned on the Proposal Form, is for the work as described in the Request for Proposal, and otherwise defined in the Contract Documents. However, the undersigned proposes the following substitutions, which were not Pre-Approved prior to the bid date, for the Owner's consideration. All substitutions must be listed on this form and submitted with the bid or they will not be reviewed.

2.	Complete, attaching additional sheets	as necessary:
	Bidder proposes [check one]:	no substitutions. the following substitutions:
Specifi or Mate	ied Product erial	Proposed Substitution
3. 4.	Bidder hereby certifies that the reques noted. Bidder will supply all documenta	itted on the assumption that substitution requests will not be approved.  ted substitutions are equal or better in all respects to what is specified, unless otherwise tion to support this claim as attachments to the Substitution Listing with their bid. Failure to result in the disqualification of the bid response.
	URE MUST BE IDENTICAL T PROVIDED ON BID FORM	BIDDER:

### <u>06 – NONCOLLUSION AFFIDAVIT</u>

PROJECT:

PROJECT: OWNER:	0023-22C.1 0023-22C.1 LAKESIDE UNION LAKESIDE UNION SCHOOL DISTRICT	SCHOOL DISTRICT NETWORK ELECTRONICS
	(Public Contract	Code Section 7106)
State of Calif	) s	
County Of		
the bidder has recolluded, conspirite bidder has not the bidder or advantage againate are true; and thereof, or divu	the party making the foregons on, partnership, company, association, organization not directly or indirectly induced or solicited any other ired, connived, or agreed with any bidder or anyone not in any manner, directly or indirectly, sought by agany other bidder, or to fix any overhead, profit or cost the public body awarding the contract of anyone I, further, that the bidder has not, directly or indirectly.	rn, deposes and says that he or she is
	-	(SIGNATURE OF BIDDER)
	NOTARY FOR NONC	OLLUSION AFFIDAVIT
Subsc	ribed and sworn to (or affirmed) before me this day	, 20
	-	(SIGNATURE OF NOTARY)
[SEAL OF NO	TARY]	
		(TYPED NAME OF NOTARY)

### 09 - BIDDER'S QUALIFICATION FORM

PROJECT: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS
LAKESIDE UNION SCHOOL DISTRICT

The prospective Bidder shall furnish all the following information accurately and completely. Failure to comply with this requirement fully and completely may result in rejection of any bid submitted. Additional sheets may be attached if necessary. "You" or "your" as used in this questionnaire refers to the Bidder's firm and any of its owners, officers, directors, shareholders, parties, or principals. Owner has discretion to request additional information depending on the project.

1.	Firm name and address:
2.	Telephone:
3.	Type of firm: (check one) Individual Partnership Corp
4.	Names and titles of all principals of the firm:
5.	Number of years as contractor. Include only years in this type of construction and only the years with the current entity in its current form: Years
6.	Years of experience your firm has in public school construction work:
	As prime contractor: As subcontractor:
7.	In the last five years has your firm or any of its principals defaulted so as to cause a loss to a surety? Response mus include information pertaining to principals' associations outside of the firm bidding this Project. If the answer is yes, give date name, and address of surety and details.
3.	In the last five years have you or any of your principals been assessed liquidated damages for any project? Response must include information pertaining to principals' associations outside of the firm bidding this Project. If yes, explain:

9.	que prir	the last five years have you or any of your principals been in litigation or arbitration or a dispute of any kind on a question of estions relating to a public construction project and/or an E-Rate project? Response must include information pertaining to a public agency and details of the dispute ach additional pages, as necessary.
10.	per	the last five years have you or any of your principals ever failed to complete a project? Response must include information taining to principals' association outside of the firm bidding this Project. If yes, provide owner's name and details. Attack ditional pages, as necessary.
	_	
11.	Exp	perience  Provide the total number of the specified Systems that you have installed (not using subcontractors) in the last 3 years. (The winning Contractor will be responsible to provide a complete list of reference to confirm this number if asked)
	b.	11b. Provide the number of the specified Systems that you have installed (not using subcontractors) in the Education K-12 Market in the last 3 years. (The winning Contractor will be responsible to provide a complete list of reference to confirm this number if asked)
12.	Ser	vice
	a.	Provide the Address of the Service Facility that will be responsible for service calls for this project:  Address  City State Zip
	b.	Provide the number of Manufacture Certified Technicians that who are employed by you, which are responsible for service call-ins. (The winning Contractor will be responsible to provide copies of the Manufacture Certificates to confirm this number if asked)
	С.	12c. Provide the hourly charge that you will charge the Owner for Non-Warranty service calls. Price will include all fees including but not limited to travel charges and hourly minimum charges.

a.	Provide any additional information that you deem as pertinent to this project that will reflect an ROI (Return On Investment) for the specified system that you are proposing to install.
-	
b.	Provide any additional information that you deem as pertinent to this project that demonstrates additional functions and features of the specified system that you are proposing to install.
_	

13. Additional Features

14. **List of References:** Provide information on the three largest E-Rate projects your company has completed in the last five years that comes closest to matching the scope of this RFP. If Contractor has not completed an E-Rate project, provide the largest three "Educational Market" projects your company has completed in the last five years. Contractor may include additional documentation.

### Project #1

Project Name:	( <del></del>
Contact Information: Address:	
Phone Number: Contact Person: Name: Title: Phone #:	
Description of Project:	
Project Start Date:	
Project Completion Date:	
Contract amount:	<del></del>
Architect/Engineer: Firm Name: Contact Person: Name: Title: Phone #:	

### Project #2

Project Name:	<u> </u>
Contact Information: Address:	
Phone Number: Contact Person: Name: Title: Phone #:	
Description of Project:	<u> </u>
	-
Project Start Date:	
Project Completion Date:	
Contract amount:	
Architect/Engineer: Firm Name: Contact Person: Name: Title: Phone #:	

### Project #3

Project Name:	2
Contact Information: Address:	
Phone Number: Contact Person: Name: Title: Phone #:	
Description of Project:	-
Project Start Date:	
Project Completion Date:	
Contract amount:	·
Architect/Engineer: Firm Name: Contact Person: Name: Title: Phone #:	

### 10 - MANUFACTURE'S CERTIFCATION FORM

PROJECT: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS
LAKESIDE UNION SCHOOL DISTRICT

Please provide the following information concerning any Manufacture's Certifications that apply to the material and scope as defined in the Project Specifications and Bid Drawings for the 0023-22C.1 Lakeside Union School District Network Electronics <u>FY2022</u> E-Rate Project for the Lakeside Union School District.

Certification #1 Name of Manufacturer		
Certification Expiration Date _		
Certification #2 Name of Manufacturer		
Certification Expiration Date		
Certification #3 Name of Manufacturer Certification Expiration Date		·
Certification #4 Name of Manufacturer		
Certification Expiration Date _		
Certification #5 Name of Manufacturer		
Certification Expiration Date		
Please attach a copy(ies) of you	our comp	any's Manufacturer's Certification(s).

### 14 - CONTRACTOR AGREEMENT

THIS AGREEMENT is entered into by and between the Lakeside Union School District, hereinafter called "District", and hereinafter called "Contractor,". District and Contractor are sometimes
individually referred to as "Party" and collectively as "Parties." This Agreement is made with reference to the following facts:
WHEREAS, The District published a Request for Proposal and seeks to procure the work covered in the Agreement in accordance with Public Contract Code 20118.2;
WHEREAS, The Contractor understands that the Agreement is contingent on the District's receipt of federal and/or state funds for the work covered in this Agreement. If the District does not receive adequate federal and/or state funds, this Agreement shall be null and void at the District's request. In the event that the Agreement is rendered void, the District will not be liable for any costs incurred by the Contractor prior to the issuance of a Notice to Proceed; and
NOW, THEREFORE, the Parties, in consideration of the mutual covenants hereinafter set forth, agree as follows:
<ol> <li>Contract Documents. The complete contract includes all of the "Project Documents" provided in the Request for Proposal, including all modifications, addenda and amendments thereto. The Contract Documents are complementary and what is called for by anyone shall be as binding as if called for by all.</li> </ol>
<ol> <li>Scope of Work. The Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, and material necessary to perform and complete, in a good workmanlike manner, the work in strict accordance with the Request for Proposal 0023-22C.1 0023- 22C.1 Lakeside Union School District Network Electronics.</li> </ol>
It is understood and agreed that the work shall be performed and completed as required in strict accordance to the Contract Documents including, without limitation, the Drawings and Specifications, under the direction and supervision of, and subject to, the approval of the District or its authorized representative.
1. <u>Total Contract Price</u> – As full consideration for the faithful performance of the agreement, District shall pay to Contractor, subject to any additions or deductions as provided in the Contract Documents, the sum of:
Total sum of Base Bid
Dollars (\$).
CONTRACTOR LEAVE BLANK TO BE FILLED IN BY THE OWNER
Total sum of Base Bid

- 2. Work to Commence It is hereby understood and agreed that the wok under this Agreement shall not commence until after the issuance of the Notice to Proceed. No work may commence until after April 1 of the previous funding year per the requirements of the E-Rate Program.
- 3. <u>Time for Completion</u> Project must be completed within ninety (90) consecutive calendar days from the date specified in the District's Notice to Proceed. Agreement may be extended if mutually agreed on by both parties in writing.

Should the Contractor fail to complete this Contract, and the Work provided herein, within the time fixed for completion, due allowance being made for the contingencies provided for herein, the Contractor shall become liable to the District for all loss and damage that the District may suffer on account thereof.

Dollars (\$\_

- 4. Coordination of Work The Contractor shall coordinate its work with the Work of all other contractors. The District shall not be liable for delays resulting from Contractor's failure to coordinate its Work with other contractors in a manner that will allow timely completion of Contractor's Work. Contractor shall be liable for delays to other contractors caused by Contractor's failure to coordinate its Work with the work of other contractors.
- 5. Loss Or Damage The District and its authorized representatives shall not in any way or manner be answerable or suffer loss, damage, expense, or liability for any loss or damage that may happen to the Work, or any part thereof, or in or about the same during its construction and before acceptance, and the Contractor shall assume all liabilities of every kind or nature arising from the Work, either by accident, negligence, theft, vandalism, or any cause whatever; and shall hold the District and its authorized representatives harmless from all liability of every kind and nature arising from accident, negligence, or any cause whatever.
- 6. Payment On or before the twentieth (20th) day of each month, Contractor shall submit to the District an itemized application for payment for Work completed during the prior month. The application shall include all information required by the District and shall be in a format approved by the District.

Contractor may be required to furnish a detailed schedule of values upon request of the District and in such detail and form as the District shall request, showing the quantities, unit prices, overhead, profit, and all other expenses involved in order to provide a basis for determining the amount of progress payments. No progress payments will be made for Work not completed in accordance with this Agreement or for any amounts withheld by the District due to punch list items, disputed work or stop notices, upon final completion.

District shall make said payment of any balance due to the Contractor promptly upon filing the Notification of Completion for the Project, receipt of a release of lien and claims from the Contractor pursuant to Civil Code section 3262, and its acceptance of the Work. In the event that the District is required to withhold amounts from payment due to punch list items, disputed work or stop notices, Contractor shall execute a Conditional Waiver and Release upon Final Payment on the form prescribed in Civil Code section 3262 and shall execute an Unconditional Waiver and Release upon Final Payment on the form prescribed in Civil Code Section 3262, upon the District's payment of any amounts originally withheld from payment. Pursuant to California law, should a dispute arise between the Contractor and District, including amounts withheld for punch list items, District may withhold from the payment an amount not to exceed one hundred and fifty percent (150%) of the disputed amount and/or the amount of the punch list work.

The Contractor to comply with the SLD's Form 474 "Service Provider Invoicing" (SPI) method for this contract. Contractor will invoice USAC directly for the committed funding amount of "eligible" equipment and services. The Owner will only be responsible for their percentage of the "eligible" equipment and services and 100% of "ineligible" equipment and services. A copy of the Form 474 will be sent to the Project Administrator, for approval, prior to be sent to USAC.

In the event that the Owner authorizes the Service Provider to begin service prior to filing a Form 486 (Receipt of Service Confirmation Form), the Owner agrees to pay the Service Provider in full for the discounted and undiscounted amount of the accepted service(s) received. The Owner shall, at their sole discretion, seek reimbursement for the discounted amount of the service provided from USAC. The Owner shall do so by preparing and submitting a Form 472 Billed Entity Applicant Reimbursement (BEAR) to USAC. Service Provider agrees to remit any and all reimbursement payments received by the Service Provider as a result of a Form 472 filed by the Owner, within 20 business days after receipt of funds released by USAC.

- 7. Additional Work To the extent that additional work is required for the proper completion of the Work due to unforeseen circumstances and/or site conditions and is, therefore, not set forth in Contract Documents, the Parties may execute a change order to this Agreement setting forth the scope of such additional work, the time for completion for such additional work and the amount of additional compensation.
- 8. <u>Assignment of Contract</u> Neither Party shall not assign, transfer, convey, or otherwise dispose of this Agreement or of his/her right, title of interest in or to the same or any part thereof without previous consent in writing from the other Party's authorized representative.
- 9. <u>Suspension/Termination of Contract</u> If Contractor fails to commence work as provided in the Agreement, or fails to make delivery of materials promptly as ordered and such delivery is so late as to amount to gross negligence or willful misconduct, or if in the opinion of District's authorized representative, Contractor is not carrying out the provisions of the Agreement in their true intent and

meaning, written notice will be served on Contractor to provide, within a specified time to be fixed by District's authorized representative, for satisfactory compliance with this Agreement. If Contractor neglects or refuses to comply with such notice within the time therein fixed, he/she shall not thereafter exercise any rights under said Agreement or be entitled to receive any of the benefits thereof, except as hereinafter provided, and District's authorized representative may with the approval of the District Board perform any part of the Project or purchase any or all of the material included in the Agreement or required for the completion thereof, or take possession of all or any part of the machinery, tools, appliances, materials and supplies used in the Project covered by the Agreement or that have been delivered by or on account of Contractor for use in connection therewith, and the same may be used either directly by District or by other parties for it, in the completion of the Project.

District has the right to terminate or abandon any portion or all of the Project under this agreement by giving ten (10) calendar days written notice to Contractor and its Surety. In such event, District shall be immediately given title and possession to all original field notes, drawings and specifications, written reports and other documents produced or developed for that portion of the Project completed and/or being abandoned. District shall pay Contractor the reasonable value of services rendered for any portion of the Project completed prior to termination. If said termination occurs prior to the issuance of the Notice to Proceed, the District shall not be liable to the Contractor for any costs or amounts whatsoever under this Agreement. If said termination occurs prior to completion of any task for the Project for which a payment request has not been received, the charge for services performed during such task shall be the reasonable value of such services, based on an amount mutually agreed to by District and Contractor of the portion of such task completed but not paid prior to said termination. District shall not be liable for any costs other than the charges or portions thereof which are specified herein. Contractor shall not be entitled to payment for unperformed services, and shall not be entitled to damages or compensation for termination of the Project.

Contractor may terminate its obligation to provide further services under this Agreement upon thirty (30) calendar days' written notice to District only in the event of substantial failure by District to perform in accordance with the terms of this agreement through no fault of Contractor.

- 10. Procedure for Resolving Disputes The parties to this Agreement are subject to the provisions of Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3 of the Public Contract Code (as amended by the Statutes of 1990, Chapter 1414, effective January 1, 1991), which requires compliance with the following procedures to resolve any claim by the contractor of \$375,000 or less regarding an extension of time, a change order, extra work, or any other disputed amount: If following the meet and confer conference the claim or any portion remains in dispute, the claimant must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.
- 11. Indemnification To the fullest extent permitted by law, Contractor shall indemnify, defend and hold harmless District against any and all claims involving any type of property damage or personal injury, including death, that may be asserted by any person or type of entity, arising out of or in connection with the performance of work, both on and off the job site; provided however, Contractor shall only be liable to the extent of its negligence or willful misconduct. Contractor will defend any action filed in connection with any of said claims, damages, penalties, obligations or liabilities and will pay all costs and expenses, including attorney fees in connection therewith. Contractor will promptly pay any judgment rendered against Contractor or District arising out of or in connection with such work, operation or activities of Contractor hereunder and Contractor agrees to save and hold District harmless there from. District may retain to the extent it deems necessary, the money due to Contractor under and by virtue of this Agreement until disposition has been made of such actions or claims for damages as specified herein above.
- 12. <u>Interpretation</u> In interpreting this Agreement, it shall be deemed that it was prepared jointly by the Parties with full access to legal counsel of their own. No ambiguity shall be resolved against any party on the premise that it or its attorneys were solely responsible for drafting this Agreement or any provision thereof.
- 13. Governing Law This Agreement shall be construed in accordance with and be governed by the laws of the State of California. The Parties agree that Kern County, California is the proper venue for enforcement of the terms of this Agreement. The prevailing party in any action to enforce this Agreement or otherwise concerning the terms of the settlement of the action shall be awarded costs and attorney's fees.
- 14. Equipment Warranty Contractor shall maintain a guarantee that all items delivered under this Agreement are protected against imperfections of materials and/or workmanship during the period of the Agreement. Within thirty (30) days of completion of the Project, the Contractor shall assign any manufacturers or other equipment warranties to the District and shall provide the District with any relevant document(s) thereto.

Should the contract warrant an additional term above the already established term.

- Integrated Agreement This Agreement embodies the entire understanding between the Parties pertaining to the matters described herein. Each party acknowledges that no party, agent or representative of the other party has made any promise, representation, or warranty, express or implied, not expressly contained in this Agreement, that induced the other party to sign this document. No modification of this Agreement shall be valid unless agreed to in writing by the Parties. This Agreement may be executed in separate counterparts, the whole of which shall constitute a binding agreement. Facsimile or E-mail signatures, when received, shall have the same force and effect as original signatures.
- 2. <u>Contract Expiration</u> This agreement expires on the date listed below. The contract may be extended upon agreement by both parties. Contract Expiration Date: **September 30, 2022**

**IN WITNESS WHEREOF**, the parties hereto have caused this Amendment to be duly executed and delivered as of the Effective Date set forth in the introductory paragraph above.

"DISTRICT"	"CONTRACTOR"
Lakeside Union School District	
Ву:	Ву:
Name:	Name:
Title:	Title:
Date:	Date:

### **SCOPE OF WORK**

Contractor will be responsible for all work as described in the "Scope of Work", "Project Documents", "Specifications" and "Drawings". It is the responsibility of the Contractor to bid a complete and operable solution. If the bidder feels that the system described is not complete, the Bidder will must address their specific concerns in writing to the Owner before submitting a quote. The Owner will not be responsible for additional costs incurred by the bidder due to the submission of an incomplete bid.

### **GENERAL REQUIREMENTS**

The Contractor will be required to provide applicable State License for the scope of work described herein. The Contractor's quote shall include a warranty for all work to be performed for no less than 12 months from the date of completion.

Clean Up work will be performed daily and will be required in one area before moving to another area to perform work.

The installation schedule pertaining to this bid package must be adhered to by the contractor or liquidated damage will be assessed by the Owner in the amount listed in the agreement. No extension of time will be granted unless written consent from the owner is given.

Buildings will be available to the contractor during regular business hours for investigation and prep work. This work shall not disrupt classroom instruction nor interfere with the safety of students and staff.

Contractor's price will include cutover and testing of equipment after 4:00pm and before 7:30am of the next business day. Construction hours and site access may vary due to normal school hours, holidays, summer break. Contractor will work with the District to make use of non-instructional time that falls within normal school hours such as minimum days, school holidays, and/or professional development days.

### PROJECT OBJECTIVE

The Contractor will be responsible for the removal of the existing data network switches and shall return all removed equipment to the District. The new network switch installation will include Core and Edge switches, into existing racks locations. The Contractor will be responsible to provide new fiber optic patch cords and connect all existing copper station ports to the new switches. All programming, configuration, testing, labeling and documentation will be provided in the contactor's bid price.

### **IMPLEMENTATION**

Contractor will provide in their quote the cost to provide and install and program all equipment as described in the Equipment List. The contractor must meet the minimum manufacturer certifications.

### **NETWORK SWITCHES**

- 1. Contractor will provide programming and installation as follows:
  - a. Core and Edge Switches
    - i. Shall be pre-programmed and tested off-site, to the fullest ability of the contractor, prior to beginning on site work or installation of equipment.
    - ii. Contractor will program the new switches to include the following Simple Network Management Protocol (SNMP) at a minimum. The contractor should anticipate additional programming requirements by the District.

Logging History Errors	Logging Trap Warnings	Logging Buffer
Access List	snmp-server Community	snmp-server informs retries 10 timeout 30 pending 100
Logging Host	snmp-server enable traps	snmp-server system-shutdown
snmp-server tftp-server-list	snmp-server contact	snmp-server location
Chassis-id: (serial number)	snmp server enable traps snmp authentication linkdown linkup coldstart warmstart	Snmp-server enable traps cpu threshold
Snmp-server enable traps tty	Snmp-server enable traps vtp	Snmp server enable traps flash
Snmp server enable traps vlancreate	Snmp-server enable traps envmon fan shutdown supply temperature status	Snmp-server enable traps port- security
Snmp-server enable traps entity	Snmp-server enable traps config	Snmp-server enable traps config- copy

Snmp-server enable traps bridge newroot topologychange	Snmp-server enable traps stpx inconsistency root-inconsistency loop inconsistency	Snmp-server enable traps syslog
Snmp-server enable traps mac- notifications change move threshold	Snmp-server enable traps vlanmembership	Snmp-server host (host IP) !New Prime
Snmp-server host (IP) !New Live Action	Snmp ifmib ifindex persist	

### b. Licensing

- i. The Contractor shall provide all licensing as required and described in these documents.
- ii. The Contractor shall install all licensing as required by the manufacturer to provide a complete and operable system at the time of turn-over to the Owner.

### **EXCLUDED FROM CONTRACTOR'S SCOPE OF WORK**

The following Items are excluded from the Contractor's Scope of Work for this Project and will be provided by others:

- 1. Structured Cabling and Fiber Optics Inter/Intra Building
- 2. Rack and Cabinet equipment housings
- 3. Power and Cooling for equipment locations.

### **END SCOPE OF WORK**

# LAKESIDE USD EQUIPMENT SCHEDULE

## Lakeside Elementary School

Manufacturer	Item Description	Part Number	ğ
Juniper	EX2300-48P eRate bundle with 5YR license, support, software updates, Mist wired assurance and VNA	B-EX230048P-5M2-E	ω
Juniper	EX2300-24P eRate bundle with 5YR license, support, software updates, Mist wired assurance and VNA	B-EX230024P-5M2-E	2
Juniper	12x10G SFP+, 36x1G SFP port fiber switch with 2x100G uplink/stacking ports. MACsec AES256 capable (optional license sold separately). Optional extension module(sold separately): 4x10G or 4x25G	EX4400-48F	_
Juniper	SW, EX, Advanced, Class 3 (32 or 48 ports), includes Wired Assurance and VNA subscription for EX32 or EX48 Port Switches with SVC NEXT DAY support, 5 YEAR	S-EX-A-C3-5-ND	-
Juniper	550W compact AC AFO power supply for EX4400 switches	JPSU-550-C-AC-AFO	-
Juniper	Power Cable, US	CBL-EX-PWR-C13- US	<b>~</b>
Juniper	SFP, 1G, FDDI 220m and OM1 275m/OM2 MMF 550m, Extended Temperature (-10 through 85 DegC), Duplex LC connector	SFP-1G-SX-C	17
Juniper	SFP+, 10GBASE-LR, SMF 10 km, Extended Temperature (0 through 85 DEGREE C), Duplex LC connector	SFPP-10G-LR-C	2
Juniper	SFP+, 10GE Direct Attach Copper Cable, 1 meter, Standard Temperature (0 through 70 DEGREE C), 0.57W, 30 AWG	EX-SFP-10GE-DAC- 1M	-

### Donald E. Suburu School

Politaid E. Odbal a ocilool	u Oction		
Manufacturer	Item Description	Part Number	ĝ
Juniper	EX2300-48P eRate bundle with 5YR license, support, software updates, Mist wired assurance and VNA	B-EX230048P-5M2-E	19
Juniper	EX2300 Virtual Chassis License	EX2300-VC	2
Juniper	12x10G SFP+, 36x1G SFP port fiber switch with 2x100G uplink/stacking ports. MACsec AES256 capable (optional license sold separately). Optional extension module(sold separately): 4x10G or 4x25G	EX4400-48F	-
Juniper	SW, EX, Advanced, Class 3 (32 or 48 ports), includes Wired Assurance and VNA subscription for EX32 or EX48 Port Switches with SVC NEXT DAY support, 5 YEAR	S-EX-A-C3-5-ND	-
Juniper	550W compact AC AFO power supply for EX4400 switches	JPSU-550-C-AC-AFO	-
Juniper	Power Cable, US	CBL-EX-PWR-C13- US	-
Juniper	SFP, 1G, SMF 10km and MMF 550m, Extended Temperature (-5 through 70 DegC), Duplex LC connector	SFP-1G-LX-C	-
Juniper	SFP, 1G, FDDI 220m and OM1 275m/OM2 MMF 550m, Extended Temperature (-10 through 85 DegC), Duplex LC connector	SFP-1G-SX-C	16
Juniper	SFP+, 10GE Direct Attach Copper Cable, 1 meter, Standard Temperature (0 through 70 DEGREE C), 0.57W, 30 AWG	EX-SFP-10GE-DAC-	က

### **END OF RFP**

### **NOTICE TO BIDDERS**

NOTICE IS HEREBY GIVEN that the Board of Education of the Lakeside Union School District, Bakersfield, CA, here after referred to as "OWNER", acting by and through its governing board and representatives, in accordance with Public Contract Code 20118.2, is requesting sealed bids, for the furnishing of technology equipment for Request for Proposal (RFP) 0023-22C.1 0023-22C.1 Lakeside Union School District Network Electronics for Lakeside Union School District.

All bids shall be delivered to **4909 Calloway Drive**, **Bakersfield**, **CA 93312** or by email to p2bids@infinitycomm.com by **February 25**, **2022** up to, but no later than, **11:00am**. Proposals received after the specified due date, time or other than at the location shown will be considered non-responsive.

Each bid must conform to the RFP and bid documents. Copies of the RFP and bid documents are available and must be obtained from the following website: <a href="https://www.infinitycomm.com/projects.html">https://www.infinitycomm.com/projects.html</a> & <a href="https://www.infinitycomm.com/projects.html">www.usac.org.</a>

The services requested depend on partial funding from the School and Libraries Division's E-rate Program. All contracts entered into as a result of this advertisement shall be contingent upon the approval of discounts from the Universal Services Administrative Company (USAC) and the OWNER's acceptance of the discounts. The Contractor shall be responsible to invoice and collect payment of the discounted contract amount from USAC unless otherwise specified or directed by the Owner. The undiscounted contract amount will be the maximum amount that the OWNER is liable. On the day of the bid the Contractor shall supply their Service Provider Identification Number (SPIN) and must certify that their SPIN is "current", to have their proposal considered.

This project is anticipated to start after July 1, 2022, and will have a duration of ninety 90 days. All work shall be completed per the agreed upon project schedule, but no later than <u>September 30, 2022</u>.

The District reserves the right to reject any and all bids and to waive any irregularities or informalities in any bids or in the bidding. No bidder may withdraw his bid for a period of 30 days after the date set for the opening of bids. For information or questions regarding bidding, please email John Cleveland at p2bids@infinitycomm.com

Board of Education of the Lakeside Union School District

Project #0023-22C.1

Dates of Advertisement: January 31, 2022, and February 7, 2022

### Lakeside Union SCHOOL DISTRICT

Project # 0023-22C.2

### **NETWORK ELECTRONICS**

DATE: February 1, 2022

### **ADDENDUM #1**

Notice to contractors. You are hereby notified of the following changes in the plans and specifications, which shall take precedence over anything published prior to this date.

### **Item 1 - Network Electronics RFP Clarification:**

**1.1** Adding Specification Section 27-2000 to RFP within this Addendum.

### SECTION 272000 - NETWORK ELECTRONICS

### Part 1 - GENERAL

### **1.1** Scope of Work

- A. This document describes the requirements for the contractors, products and installation relating to furnishing and installing Network Electronics and Uninterruptible Power Supplies (UPS).
- B. Contractor will provide a bid including all labor, materials, tools, and equipment required for the complete installation of work called for on the Construction Drawings and described in this Document. It is the responsibility of the Contractor to provide all material necessary to provide a complete and operable system. If the contractor feels that the system described is incomplete, they must address this in writing to the Owner/Owner's Representative before providing a bid.
- C. All Products described and Part Numbers given in this Specification are "or equivalent" unless otherwise noted.
- All questions concerning non specified product and services will be address to the Owner's Representative before Contactor provides a bid. Owner expects that by accepting the Contractor's bid proposal that the Contractor has provided a competent bid for a complete solution.
- E. Product specifications, general design considerations, and installation guidelines are provided in this document. Quantities, Part Numbers and Material Descriptions will be provided as an attachment to this document.

### 1.2 Regulatory References

- A. Contractor will comply will all Federal, State, Local Codes/Regulations, and Industries Standards.
  - 1. Federal:
    - NFPA 70 National Electric Code(NEC)
    - FCC
      - Part 15
      - Part 68
  - State of California:
    - CCR Part 2 Uniform Building Code.
    - CCR Part 3 California Electrical Code
    - Occupational Safety and Health Act (OSHA).
    - Title 24, Building Standards, State of California.
    - Title 19, California Code of Regulations.
    - Title 8, Electrical Safety, State of California
  - 3. Industry Standards:
    - Telecommunications Industry Associations/Electronics Industry Association (TIA/EIA)
    - Institute of Electrical and Electronic Engineers (IEEE)
      - 802.3 (Ethernet)
      - 802.3ab (Gigabit Ethernet over 4-pair Category 5 or higher)
      - 802.3ae 10 Gigabit Ethernet
      - 802.3Z (Gigabit Ethernet over optical fiber)
      - 802.1D Spanning Tree Protocol
      - 802.1d/802.1D-1998 (Ethernet Bridging)
      - 802.1q (VLAN tagging)
      - 802.1p (Prioritization)
      - 802.1w (Rapid Spanning Tree)
      - 802.1X (Port based Authentication)
      - 802.1ad (Link Aggregation)
      - 802.1s Multiple VLAN Instances of Spanning Tree
    - Underwriters Laboratories Inc. (UL)
    - International Organization for Standardization/International Electromagnetic Commission (ISO/IEC) ISO 11801 Generic Cabling for Customer Premises
    - Building Industry Consulting Services International (BICSI)

LAN Specialty Methods Manual (2009 or latest).

- B. If there is a conflict between applicable documents, then the more stringent requirement shall apply. All documents listed are believed to be the most current releases of the documents. The Contractor has the responsibility to determine and adhere to the most recent release when developing the proposal for installation.
- C. This document does not replace any code, either partially or wholly. The contractor must be aware of and comply with all local codes that may impact this project.

### 1.3 Contractor Qualifications/Quality Assurance

### A. Contractor Qualifications

Contractors will submit the following Qualification Documentation along with their bid proposal:

- 1. A List of References. Contractor shall have been in business for no less than five (5) years and provide a list of a minimum of three (3) projects of similar size and scope. List will include:
  - Project Name
  - Estimated Telecommunications Project Value
  - Brief Description of Work Performed
  - Contact Person
  - Contact Information, including Name of Business, and Phone Number.
- 2. A photocopy of your Contractor License Certificate.
- 3. A photocopy of your Manufacture Partner Certificate.
  - Certified Manufacture Partner or:
    - Certified Manufacture Partner with Advanced Routing and Switching Specialization Certified Manufacture Partner with Advance Wireless LAN Specialization
  - After the winning Contractor has been selected, they will be required to provide proof that at least 50% of the installers that will work on this project have been certified by Manufacture.

### B. Quality Assurance

Contractors wishing to provide a proposal for this project are required to comply with the following without exception:

- 1. The winning Contractor will assign this project to a competent Project Manager who has demonstrated their ability to supervise a telecommunications project of the same size and scope.
  - The contractor will make this person available to the Owner/Owner's Representative before
    the start of this project for an interview. This person must be deemed acceptable by the
    Owner and/or their Representative before work can begin.
  - Project Manager will be required to be available for scheduled on site project meetings at no additional cost to the Owner.
  - Project Manager will be required to be available to meet on site with the Owner/Owner's representative with a minimum of 24 hours notice for non-emergency issues, and a minimum of 4 hours for emergency issues at no additional cost to the Owner.
- All material and equipment to be installed on this project will be "new". If the Owner/Owner's
  Representative discovers that "used" material or equipment has been installed on this project the
  Contractor will be required to replace said materials and/or equipment with "new" products at no
  additional cost to the Owner.
  - "New" Materials and products manufactured within one (1) year prior to installation, and meet
    or exceed the latest published specifications of the manufacture. Also, these materials and
    equipment may not have been in use before installation on this project unless directed
    otherwise in the project documents.
- 3. Contractor must warranty all materials, equipment, and labor for a minimum of one (1) year.
  - Warranty will provide repair/replacement of all defective or improperly installed materials at no additional cost to the Owner (including Labor, drive time, shipping, taxes, etc.).
  - Contractor is required to be on site to repair/replace defective items no later than 24 hours after receiving trouble call.
  - Warranty will cover normal Business hours, 8am 5pm, Monday thru Friday. All calls received
    on a Friday or the day before a holiday will be held until the following regular business day.

### 1.4 Submittal Documentation

- A. The successful contractor shall provide three (3) copies of their submittal package.
- B. The Submittal Package will include:
  - The successful contractor will provide their submittal package in accordance with the RFQ section "Project Management" sub section "Submittals".

### 1.5 Equivalent Products

- All Products described and Part Numbers given in this Specification are those of Juniper and APC or equivalent unless otherwise noted.
- B. Pre-Approved Equals;
  - 1. Switching None at this time
  - 2. Wireless None at this time
- C. Contractors wishing to approve a system other than those specified in this document will be required to perform the following:
  - Provide System specifications and cutsheets for all system components for the proposed new system(s).
  - 4. Provide an itemized comparison to each of the system functions as described in this specification. Include in that document how the proposed system compares to the specified system described in this document on a line by line basis, using one of the following three criteria: "exceeds"/"matches"/"unequal".
- D. All other products than those specifically address in the bid document that the Contractor is seeking approvals for must be *received* by the Owner's Representative *no later than ten (10) days before the bid date*. All Approved Equals will be published in addendum form prior to the bid date.
- E. Failure to received written approval for product installed that deviates from the products called for in this specification and/or on the project drawings will result in the contractor having to replace the unapproved materials and equipment with the originally specified products at no additional cost to the Owner.
- F. All proposed system documentation must be sent to the Owner's Representative via one of the following; mail, fax or email. The Contractor will include the project name, their contact information, and the specification section number that the proposed system is comparable to.

Infinity Communications and Consulting, Inc. 4909 Calloway Dr.
Bakersfield, Ca. 93312 (661) 716-1840 Phone (661) 716-1841 Fax p2bids@infinitycomm.com Email

### **1.6** Technology Clause

- A. As technology advances, it is understood that improved or enhanced products may supersede existing products in both price and performance and yet be essentially similar. This request for bids seeks to address the rapid advances in technology by allowing functionally similar or identical products that may be introduced in the future, during the term of this bid, to be included under the general umbrella of compatible product lines and are thus specifically included in this bid document.
- B. Discontinued or end of life products shall be replaced with an equal product to the original specified product at no additional costs to the owner.
- C. Some components listed below may not be 100% eligible for erate. Contractor shall cost allocate these components based on School's and Libraries' Eligible Services List.
- D. Erate Eligibility is based on School's and Libraries' Eligible Services List. It is the bidder's responsibility to verify with USAC the eligibility of all components in the project.

### Part 2 - Products

### **2.1** Core, Edge LAN – System Equipment

- A. Core/Edge Switching (On Alisal Community School Only)
  - 1. 12 x 10GbE and 36 x 1GbE Core Fiber Switch shall provide;
    - 12 SFP+-based 10Gigabit Ethernet ports
    - 36 SFP+-based 1Gigabit Ethernet ports
    - 400-Gbps switching capacity with 245 Mpps of throughput
    - External USB and SD card support for flexible storage options; Type A (storage and boot) upto 4 GB, Optional External Memory (SD Card) 2 GB
    - 10/100/1000 RJ-45 console and management port
    - IPv6 support in hardware, providing wired-network-rate forwarding for IPv6 networks and support for dual stack with innovative resource utilization
    - Dynamic hardware forwarding-table allocations for ease of IPv4-to-IPv6 migration
    - Scalable routing (IPv4, IPv6, and multicast) tables, Layer 2 tables, and ACL and quality of service (QoS) entries to make use of eight queues per port and comprehensive security policies per port
    - Optional Module: 8 x10 GE SFP+/SFP C4KX-NM-8SFP+
    - CPU and Memory; Onboard Memory (SRAM DDR -II) 4 GB, Port Buffers 32-MB Shared Memory, CPU Dual Core 1.5 GHz
    - Qos Policy Enforcement; Per Port or Per Vlan or Per Port, Per VLAN Granularity, Class of Service (CoS) Yes
    - AC Power Max Rating 750W, System Power Consumption 330W nominal/400W max
    - Total Output BTU 1122 BTU/hr (330 W) nominal/1365 BTU/hr (400 W) max
    - The limited lifetime hardware warranty (LLW) includes 10-day advance hardware replacement for as long as the original end user owns the product.
    - The approved Core Fiber Switch shall be the Juniper Networks EX4400 Switches PN# EX4400-48F
    - Example Manufacture Pre-Configured Equipment List \*\*Single switch\*\*

	ET STUDY	Lakeside Elementary School	
Item	Part Number	Description	Quantity
1	EX4400-48F	12x10G SFP+, 36x1G SFP port fiber switch with 2x100G uplink/stacking ports.  MACsec AES256 capable (optional license sold separately). Optional extension module(sold separately): 4x10G or 4x25G	1
2	S-EX-A-C3-5-ND	SW, EX, Advanced, Class 3 (32 or 48 ports), includes Wired Assurance and VNA subscription for support, 5 YEAR	1
3	JPSU-550-C-AC-AFO	550W compact AC AFO power supply for EX4400 switches	1
4	CBL-EX-PWR-C13- US	Power Cable, US	1
5	EX4400-EM-4S	4x10G SFP+ extension module for EX4400 series of switches	1
6	SFP-1G-SX-C	SFP, 1G, FDDI 220m and OM1 275m/OM2 MMF 550m, Extended Temperature (- 10 through 85 DegC), Duplex LC connector	17
7	SFPP-10G-LR-C	SFP+, 10GBASE-LR, SMF 10 km, Extended Temperature (0 through 85 DEGREE C), Duplex LC connector	2
8	EX-SFP-10GE-DAC-	SFP+, 10GE Direct Attach Copper Cable, 1 meter, Standard Temperature (0 through 70 DEGREE C), 0.57W, 30 AWG	1
		Donald E. Suburu Elementary School	
Item	Part Number	Description	Quantity
1	EX4400-48F	12x10G SFP+, 36x1G SFP port fiber switch with 2x100G uplink/stacking ports.  MACsec AES256 capable (optional license sold separately). Optional extension module(sold separately): 4x10G or 4x25G	1
2	S-EX-A-C3-5-ND	SW, EX, Advanced, Class 3 (32 or 48 ports), includes Wired Assurance VNA subscription for EX32 or EX48 Port Switches SVC NEXT DAY support, 5 YEAR	1

3	JPSU-550-C-AC-AFO	550W compact AC AFO power supply for EX4400 switches	1
4	CBL-EX-PWR-C13- US	Power Cable, US	1
5	SFP-1G-LX-C	SFP, 1G, SMF 10km and MMF 550m, Extended Temperature (-5 through 70 DegC), Duplex LC connector	1
6	SFP-1G-SX-C	SFP, 1G, FDDI 220m and OM1 275m/OM2 MMF 550m, Extended Temperature (- 10 through 85 DegC), Duplex LC connector	16
7	EX-SFP-10GE-DAC- 1M	SFP+, 10GE Direct Attach Copper Cable, 1 meter, Standard Temperature (0 through 70 DEGREE C), 0.57W, 30 AWG	3

This Material List has been configured by Juniper Networks with the design information provided by the District and Consultant. The CONTRACTOR shall verify that this material is the correct material prior to bidding and prior to ordering. It is the CONTRACTORS responsibility for a complete system whether listed here or not.

### 2. Edge POE Switches shall provide;

- 2 x 10 Gigabit Ethernet with SFP+
- 24 or 48 ports of Gigabit Ethernet desktop connectivity
- Cisco FlexStack stacking module support
- PoE+ with up to 30W per port that allows you to support the latest PoE+ capable devices
- Up to 40 Gb of wireless capacity per switch (48-port models)
- Power supply options, with 6400W fixed power supplies for PoE+ Limited lifetime hardware warranty, including next-business-day replacement with 90-day service and support
- The approved 24 Port Edge Switch shall be the Juniper Networks EX 2300 Series (B-EX230024MP-5M2-E)
- The approved 48 Port Edge Switch shall be the Juniper Networks EX 2300 Series (B-EX230048MP-5M2-E)

It shall be the responsibility of the contractor to verify type and quantity of switches. See project drawings for reference. Each MC/HC shall have a minimum of 100% port density. Contractor shall verify POE power requirements and provide additional switches required to power all specified devices.

Example 24-port Manufacture Pre-Configured Equipment List:

		Lakeside Elementary School	
ltem	Part Number	Description	Quantity
1	B-EX230024MP-5M2-E	EX2300-24MP eRate bundle with 5YR license, support, software updates, Mist wired assurance and VNA	2
		Donald E. Suburu Elementary School	
	and the latest the same of	2011ala El Gazara Eloniolitary Concor	
Item	Part Number	Description Description	Quantity

This Material List has been configured by Juniper Networks with the design information provided by the District and Consultant. The CONTRACTOR shall verify that this material is the correct material prior to bidding and prior to ordering. It is the CONTRACTORS responsibility for a complete system whether listed here or not.

Example 48-port Manufacture Pre-configured Equipment List:

1		Lakeside Elementary School	
Item	Part Number	Description	Quantity

1	B-EX230048MP-5M2-E	EX2300-48MP eRate bundle with 5YR license, support, software updates, Mist wired assurance and VNA	8
2	EX2300-VC	EX2300 Virtual Chassis License	0
3	EX-SFP-10GE-DAC-1M	SFP+, 10GE Direct Attach Copper Cable, 1 meter	0
		Donald E. Suburu Elementary School	
Item	Part Number	Donald E. Suburu Elementary School  Description	Quantity
ltem 1	Part Number B-EX230048MP-5M2-E		Quantity 10
Item 1 2		Description  EX2300-48MP eRate bundle with 5YR license, support, software updates, Mist	•

This Material List has been configured by Juniper Networks with the design information provided by the District and Consultant. The CONTRACTOR shall verify that this material is the correct material prior to bidding and prior to ordering. It is the CONTRACTORS responsibility for a complete system whether listed here or not.

### 2.2 Uninterrupted Power Supplies – System Equipment

- A. Uninterrupted Power Supplies UPS
  - Contractor will include an external UPS for the network electronics systems. A single UPS will be provided for each MC/MDF or HC/IDF designated cabinet.
  - 2. Main Crossconnect MC rooms shall have "On-Line" UPS equipment. The items described below are a minimum requirement.

On-Line UPS (Provide (1) for each MC/MDF)

Online UPS Systems provide the highest level of power protection for mission-critical applications. True on-line operation completely isolates connected equipment from all power problems: blackouts, brownouts, surges, line noise, even harmonic distortion. Double-conversion operation continually converts incoming AC power into DC power, and then resynthesizes it back into normal AC power.

- 3000VA / 3.0 kVA high power density, on-line, double-conversion, extended-run 3U rack / tower UPS - with large internal battery set for longer standard runtime
- Full load runtime 12 minutes (2400 watts)
- Half load runtime 30 minutes (1200 watts)
- Maintains sine-wave 110/120V +/-2% output during overvoltages to 138 and brownouts as low as 65V (50/60Hz auto-sensing)
- AC surge suppression 480 joules
- AC suppression response time Instantaneous
- Simultaneous communications via HID compliant USB port, serial port, SNMP/Web card slot and EPO interface
- Fault tolerant auto-bypass mode, current monitoring and switched PDU control via 2 switchable output load banks
- Input: NEMA L5-30P (120V) / Output: 4 NEMA5-15R, 4 NEMA5-15/20R & 1 NEMA L5-30R
- 2 year product warranty / \$250,000 Ultimate Lifetime Insurance
- Unit Dimensions (HWD/in) 5.25 x 17.75 x 26
- MC/MDF Locations
- The approved On-Line UPS shall be APC # SMTL3000RM2UCNC
- Accessories For UPS
- Contractors will provide two (2) PDU per MC/MDF equal to APC # AP7901B
- Horizontal Crossconnect HC/IDF rooms shall have "On-Line" UPS equipment. The items described below are a minimum requirement. On-Line UPS (Provide (1) for each HC/IDF)

Online UPS Systems provide the highest level of power protection for mission-critical applications. True on-line operation completely isolates connected equipment from all power problems: blackouts, brownouts, surges, line noise, even harmonic distortion. Double-conversion operation continually converts incoming AC power into DC power, and then resynthesizes it back into normal AC power.

- 2200VA / 2.2kVA line interactive, extended-run 2U rack/tower UPS
- Maintains sine-wave 120V nominal output over an input range of 79 to 147V
- Network communications supported via USB port, serial port, SNMP/Web card
- slot and EPO interface
- Current monitoring and switched PDU control via 3 two-outlet load banks
- Input: NEMA 5-20P (120V 15A) / Output: 8 NEMA 5-15R (120V)
- Unit Dimensions (HWD/in) 3.5 x 17.5 x 13.5
- HC/IDF Locations
- The approved On-Line UPS shall be APC # SMTL2200RM2UCNC for each location.
- For Each Compact HC/IDF Location the approved UPS Shall be APC # SCL500RM1UNC
- Accessories For UPS
- Contractors will provide two (1) PDU per HC/IDF equal to APC # AP7901B
- For Each Compact HC/IDF Location PDU is not needed
- 2.3 Contractor's price shall include the cost to install, program and configure all of the above equipment.

### Part 3 - Execution

### 3.1 General

- A. All Work described in this specifying document and on the Project drawings shall be performed in accordance with the acknowledged Professional and Industry standards and practices. All installed equipment shall meet and/or exceed the specified manufactures regulations.
- B. The Contractor shall maintain a competent supervisor and Manufacture Certified Technician assigned to this installation for the duration of the Project.
- Furnish and install all materials, devices, components and equipment required for a complete and operational system.
- D. It is the contractor's obligation to inform the Owner and/or the Owner's Representative of any and all conflict's, between the project documents and the onsite conditions.
- E. It is the Contractor's responsibility and obligation to coordinate with all necessary trades to ensure the integrity and compliance of the Manufacture and Industry standards are meet during the duration of the installation.

### 3.2 Programming

- Contractor shall provide all necessary programming to provide a complete operating Local Area Network.
- B. Contractor shall include in their bid one four hour planning meeting with the owner and their Representatives to outline all specific programming including, but limited to:
  - Notification to Contractor of the Approved IP Range.
  - All individual restrictions and permissions.
  - Contractor will address all concerns of the Owner and their Representatives.
- C. Each switch will include programming to support:
  - Account Login and Password for all management ports
  - Login Banner
  - Multiple IP Addresses
  - Radius or TACACS+ security
  - Server Time synchronization
  - Log Recording (Time stamped, sent to remote server)

- SNMP recording
- Multiple VLAN's
- VLAN trunking
- Multiple Quality of Service policies
- HREAP

Contractor will provide all necessary programming to provide a complete operating Wireless Local Area Network, including software installation and site survey results before and after wireless installation. Pre-installation survey will include:

- Proposed WAP locations
- Maps showing wireless coverage from proposed locations
- Suggested coverage enhancements or changes

Post-installation survey will include:

- Installed WAP locations with labels
- Maps showing actual wireless coverage with signal strength
- · Throughput tests from each WAP
- Contractor will turn all system passwords and copies of management software over to the District at the completion of this project.
- E. Contractor will address all concerns of the Owner and their Representatives.
- F. After installation and programming, contractor will test and verify all programming configurations.

### 3.3 Testing

- A. After installation and programming, contractor will test and verify all programming configurations.
- B. LAN Testing
  - 1. After installation and programming, contractor will test and verify all programming configurations. Including but not limited to;
    - DHCP
    - VLAN
    - QOS
    - Multi-Protocol Label Switching (MPLS)
    - Multicast
    - IP Ping
- C. WLAN Testing
  - 1. The WLAN tester shall:
    - The Analyser should be capable to monitor the 802.11a/b/g and support for 802.11i
    - The Analyzer should be capable to monitor the performance of the WLAN network
    - It should be able to monitor the RF spectrum like SNR, C/N, etc.
    - The device should be capable of
      - a. Global Positioning System Device Logging
      - b. Record and Play Back WLAN Device Information
      - c. World Mode Operation International Channel Scanning
      - d. Fifteen New WLAN Security Alarms
      - e. Four New WLAN Performance Alarms
      - f. Save and replay captured files in Wireless Sniffer in Ethereal file format
      - g. Configurable alarm threshold and audible alarm sound
      - h. Press-and-hold action supported on device icon for ease of navigation
      - i. Run-time static WEP decryption
      - j. Access control list (MAC addresses) import capability for roque AP detection
      - k. Customizable vendor ID map for MAC address display.
    - The device should capture 802.11 frames to the device trace file, Device should record all WLAN device information at the end of a real time session into the trace file.
    - The device should be able to spot misconfigured WLAN devices operating in violation with regulatory rules.
    - The device should come with following security alarms:

- Urgent AP with WEP disabled
- Warning Client station with WEP disabled
- Warning WEP initialization vector (IV) reused
- Info Device using Open authentication
- Warning Device probing network with NULL SSID
- Urgent Authentication failures abnormally high
- Urgent AP unconfigured
- Urgent Rouge AP
- Urgent Rouge client station
- Urgent Spoofed MAC address detected
- Warning Crackable WEP initialization vector (IV) used
- Info Device unprotected by VPN
- Urgent Device unprotected by 802.1X
- Warning AP broadcasting SSID
- Warning Ad-hoc mode station detected
- Urgent EAP rekey timeout too long
- Urgent Denial-of-service attack association flood
- Urgent Denial-of-service attack authentication flood
- Urgent Denial-of-service attack EAPOL-logoff
- Urgent Denial-of-service attack EAPOL-start
- Urgent Denial-of-service attack EAPOL ID flood
- Urgent Denial-of-service attack EAPOL spoofed success
- Urgent Denial-of-service attack EAPOL spoofed failure
- Urgent Denial-of-service attack De-authentication broadcast
- Urgent Denial-of-service attack De-authentication FLOOD
- Urgent Denial-of-service attack Dis-association broadcast
- 2. The contractor shall provide a complete system detail for all WLAN tests.
- D. Contractor will perform a witnessed testing for minimum of 10% of all new network devices installed as a part of this project.

### 3.4 System Documentation

- A. Upon completion of the installation, the electronics contractor shall provide four (4) full documentation sets to the Owner's Representative/Engineer for approval, one (1) to be a hardcopy and three (3) to be electronic copies. Documentation shall include the items detailed in the sub-sections below.
- B. Documentation shall be submitted within ten (10) working days of the completion of each testing phase. This is includes system single line drawings and maintenance and operation manuals, and all warranty information.
- C. The Device Information documents are to be in an Excel spreadsheet format. Each device installed will have individual information entered in the spreadsheet including:
  - Manufacturer and Model of device
  - Physical Location (may include a digital picture), and mount type
  - Serial Number of device
  - IP Address(es) assigned to device
  - Firmware revision installed
  - Address and contact information of responsible staff
- D. Each Device Configuration document shall be provided in both an electronic and text document format. One (1) to be a hardcopy print and three (3) to be electronic copies. The Device Configuration documents are to be in a text file format. Each device installed will have the following configuration information included (if applicable):
  - Manufacturer and Model of device
  - Current installed (running) configuration
  - Firmware revision installed
  - Installed modules, blades, or accessories

- E. Equipment documentation shall include the items listed below:
  - Maintenance and Operations Manuals
  - All System Passwords and Management/Programming Software

### **END OF SECTION**

### LAKESIDE UNION SCHOOL DISTRICT

Project # 0023-22C.1

### NETWORK ELECTRONICS

DATE: February 17, 2022

### **ADDENDUM #2**

Notice to contractors. You are hereby notified of the following changes in the plans and specifications, which shall take precedence over anything published prior to this date.

### Item 1 - Email RFI Questions

- Regarding the specified UPSs at Lakeside USD, can you clarify the IDF types or quantities on the maps? What is defined as a compact IDF and what is a regular IDF?
  - ICC Response Please ignore all UPS language in specification section 27-2000 Network Electronics as we are not requiring UPS products for this project.

### Item 2 – Specification Update:

- Remove UPS section 2.2 seen below from the specification section 27-2000 Network Electronics/Part 2 Products/ 2.2 Uninterrupted Power Supplies System Equipment
  - 2.2 Uninterrupted Power Supplies System Equipment
    - A. Uninterrupted Power Supplies UPS
      - Contractor will include an external UPS for the network electronics systems. A single UPS will be provided for each MC/MDF or HC/IDF designated cabinet.
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        - 3000VA / 3.0 kVA high power density, on-line, double-conversion, extended-run 3U rack / tower UPS - with large internal battery set for longer standard runtime
        - Full load runtime 12 minutes (2400 watts)
        - Half load runtime 30 minutes (1200 watts)
        - Maintains sine-wave 110/120V +/-2% output during overvoltages to 138 and brownouts as low as 65V (50/60Hz auto-sensing)
        - AC surge suppression 480 joules
        - AC suppression response time Instantaneous

- Simultaneous communications via HID compliant USB port, serial port, SNMP/Web card slot and EPO interface
- Fault tolerant auto-bypass mode, current monitoring and switched PDU control via 2 switchable output load banks
- Input: NEMA L5-30P (120V) / Output: 4 NEMA5-15R, 4 NEMA5-15/20R & 1 NEMA L5-30R
- 2 year product warranty / \$250,000 Ultimate Lifetime Insurance
- Unit Dimensions (HWD/in) 5.25 x 17.75 x 26
- MC/MDF Locations
- The approved On-Line UPS shall be APC # SMTL3000RM2UCNC
- Accessories For UPS
- Contractors will provide two (2) PDU per MC/MDF equal to APC # AP7901B
- 3. Horizontal Crossconnect HC/IDF rooms shall have "On-Line" UPS equipment. The items described below are a minimum requirement. On-Line UPS (Provide (1) for each HC/IDF)
  Online UPS Systems provide the highest level of power protection for mission-critical applications. True on-line operation completely isolates connected equipment from all power problems: blackouts, brownouts, surges, line noise, even harmonic distortion. Double-conversion operation continually converts incoming AC power into DC power, and then resynthesizes it back into normal AC power.
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  - Current monitoring and switched PDU control via 3 two-outlet load banks
  - Input: NEMA 5-20P (120V 15A) / Output: 8 NEMA 5-15R (120V)
  - Unit Dimensions (HWD/in) 3.5 x 17.5 x 13.5
  - HC/IDF Locations
  - The approved On-Line UPS shall be APC # SMTL2200RM2UCNC for each location.
  - For Each Compact HC/IDF Location the approved UPS Shall be APC # SCL500RM1UNC
  - Accessories For UPS
  - Contractors will provide two (1) PDU per HC/IDF equal to APC # AP7901B
  - For Each Compact HC/IDF Location PDU is not needed

E-Rate Bid Evaluation Worksheet	Vorksheet							Page	1 of	f1	
Funding Year:	2022										
Billed Entity Name:	Lakeside Union School District	chool Distri	75					FRN:			
Project or Service:	Network Electronics	ics									
# of Responders:	8										
						Vendor	Vendor Scoring				
		AN	AMS.net	Blu	Blue Chip	Net	NetDiverse				
Selection Criteria	Weight*	Raw Score**	Weighted Score***	Raw	Weighted	Raw	Weighted	Raw	Weighted	Raw	Weighted
Price	20%		0.00		0.00		0.00		0.00		00.0
Experience & Qualifications	30%		00.00		00.00		0.00		00:00		0.00
Accuracy of Bid	20%		0.00		00.00		00.00		00:00		0.00
			0.00		00.00		0.00		00.00		00:00
			0.00		0.00		0.00		00.0		0.00
			0.00		0.00		0.00		0.00		0.00
	400%		0.00		0.00		0.00		0.00		0.00
0	Overall Ranking		0		0	<u>-</u>	0		0		0
	•					-		-		-	
Notes: * Percentage weights must add up to 100%. <b>Price is the heaviest weighted criteria</b> ** Evaluated on a "Ranking" scale: Lowest Ranking #=worst - Highest Ranking #=best *** Weight x Raw Score	մ up to 100%. <b>Pric</b> ale: Lowest Ranki	e is the hea	rviest weighte Highest Rank	n <b>ted criteria</b> nking #=best		Comment	Comments, if needed:				
Vendor Selected:											
Approved Bv:											
	Signature										
	Print Name										
	Title										
Date:									1		
					Page 1				E-rate Bid E√	E-rate Bid Evaluation Worksheet	sheet s

Project #:		18	0023-22C.1	1	
Owner:			Network Electronics		
Bid Date:			02/25/2022 11:00AM		
	Number of Downloads	Board Pkts Due	Board Date	Addendums	
		3/1/2022	3/8/2022		2
Contractor Name		Base Bid-			
AMS	AMS.Net	\$72,412.43			
Blue	Blue Chip	\$109,855.27			
NetDi	NetDiverse	\$351,418.30			
*Did not provide any of the	equired bid documents -	*Did not provide any of the required bid documents - quote and company info only			
Notes:					
Notes:					
Notes:					
Notes:					
Notes:					

Project Name:				ت	Lakeside Union School District (Kern)	Union	Schoo	l Distri	ct (Ke	ű.						
Project #:						00	0023-22C.1	-								
Owner:						Networ	Network Electronics	ronics								
Bid Date:						02/25/2	02/25/2022 11:00AM	:00AM								
	1 01	05	03	04	02	90	20	80	60	10	-	12	13	14	15	16
Contractor Name	Bid Form	Acknowledge Addendum		Item 21 Attachment Sheet	Substitution Listing		Non- Collusion Affi		Ĭ	Contractors Quali. Quest.	Manuf. Cert			Bid Bond	in in	Bid in on time
AMS.Net	×	2		×	×		×			×	×				×	×
Blue Chip	×	2		×	×		×			×	×				×	×
NetDiverse																
	_															
	_															
Notes:	-															





PROPOSAL FOR:

### Lakeside Union School District 96430 Network Electronics Project 0023-22C.1

### **Original**

PREPARED BY: Sean Harrington, Senior Account Manager, AMS.NET



### **Table of Contents**

Proposal Narrative	Section 1
Required Bid Documents	Section 2
Project Cost Summary & Quote	Section 3
Company Overview	Section 4



### **Section 1**



502 Commerce Way, Livermore, CA 94551 925-245-6100 www.ams.net

### **Executive Summary**

Lakeside Union School District

February 22, 2022

Subject: Network Electronics for Lakeside Union School District

Mr. Cleveland,

AMS.NET is an established Ruckus/CommScope Partner in California, and has provided flexible, scalable, and cost-effective solutions for our K-12 Education partners for three decades. AMS has been fortunate to work with education partners throughout all of California, each presenting their own unique set of challenges from an infrastructure and budgetary standpoint. We strive to deliver the same level of success to each partner, in every deployment, regardless of the challenges.

### AMS.NET Base Bid Response Solution Overview

Per your RFP for Juniper network equipment, AMS.NET provides the attached alternate bid response. It substitutes the specified Juniper network equipment with equivalent Ruckus network equipment. This alternate equipment will prove a great advantage to the district.

Please see attached data sheets and comparison information for reference.

All network equipment will be Ruckus manufactured new equipment; this includes the SFP modules respective of their manufacturer.

### **Project Process**

AMS.NET will work with the district to manage the programming and installation of the equipment. AMS.NET will provide all warranty and documentation information.

We trust you will find our proposal clear, concise and that we meet all the requirements set forth by the district and the designer. We welcome any questions or concerns regarding this proposal. We are confident we can deliver the solution the district desires on time and on budget.

Sincerely,

Sean Harrington
Senior Account Manager
AMS.NET



502 Commerce Way, Livermore, CA 94551 925-245-6100 www.ams.net

### Ruckus and Juniper Differences

### Switch Portfolio

RUCKUS ICX Switches - Ruckus ICX family of fixed form-factor switches work together to simplify network setup and management, enhance security, minimize troubleshooting, and make upgrades easy. It ensures excellent throughput for the most demanding applications and works seamlessly with RUCKUS Wi-Fi access points, RUCKUS SmartZone network controllers and RUCKUS Cloud to deliver the most performance and cost effective unified wired and wireless access solutions. The family of switches include, ICX7150 and ICX7250 as Access, ICX7450 as Mid Access and Aggregation, ICX7650 as Premium Access Aggregation, ICX7750 and ICX7850 as Premium Aggregation-Core deployments. RUCKUS has built a unified wired and wireless eco system with SmartZone as an On prem single pane of glass management tool, RUCKUS Cloud to manage and configure both APs and switches and Ruckus Analytics to provide deep insights into the network performance.

Juniper EX series Switches - The Juniper EX series is part of the Campus networking portfolio with EX2300, EX3400 and EX4300 at the access, EX4600 and EX4650 at the aggregation and EX9200 and EX9250 chassis at the core level. The EX-series has multigigabit switch options but lacks a competitive offering when compared to the ICX7150-48ZP and ICX7650-48ZP when it comes to the PoE++ provision on multigigabit ports. Also, the EX-series is very shallow with the compact switches and is not competitive with the ICX7150-10ZP when it comes to full range multigigabit and PoE offering. The EX-series lacks a consistent stacking solution (virtual chassis) across all the SKUs and has an inconsistent mixed stacking solution (virtual chassis fabric) when compared to an ICX campus fabric type deployment. Juniper added Mist wireless to its portfolio but doesn't have a single management platform to configure and monitor the entire wired and wireless network from a single pane of glass.

### Switch Features and capabilities

### **Warranty and Support**

**RUCKUS ICX Switches** 

- RUCKUS Limited Lifetime Warranty provides next business day hardware replacement and software maintenance updates for the life of the switch (for initial purchaser only)
- RUCKUS warrants that hardware will be free from defect in materials and workmanship for a period of 13 months from the start date
- RUCKUS Support (TAC) technical assistance provided for 90 days (8x5) and annual support contracts available. Some SKUs include 3- years 24x7 support

Juniper EX Switches

- Juniper Networks Limited Lifetime warranty provides 20 business day hardware replacement
- Juniper lifetime hardware warranty limits the fan and power supply warranty to 5 years from the start date.
- Juniper warrants that hardware will be free from defect in materials and workmanship for a period of 12 months from the start date



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• Juniper Support (TAC) – technical assistance provided for 90 days and annual support contracts available. Some SKUs include 3-years 24x7 support

### Security

### **RUCKUS ICX Switches**

- ICX 7450 Supports hop by hop encryption using MACsec on 10GF ports with an additional MACsec license. Also supports end to end encryption using IPsec
- ICX 7650 supports MACsec 128- and 256-bit encryption

### Juniper EX Switches

- EX4300 MACsec is supported on access and uplinks with an additional license
- No IPsec support on EX4300, hence, provides only hop by hop but not end to end encryption
- EX4300-48MP supports MACsec 256 bit, but requires an additional license purchase

### **Networking Analytics and Trouble shooting**

- RUCKUS Analytics is a cloud service for network analytics and assurance. Powered by machine learning (ML) and
  artificial intelligence (AI), it delivers comprehensive visibility into network operation. The service accelerates
  troubleshooting and helps IT teams meet network SLAs. With streaming network telemetry from network
  devices, RUCKUS Analytics automatically transforms data into deep insight.
- Mist is an AI driven platform which provides Wi-Fi assurance, Wired assurance and a Virtual Network Assistant for IT. Mist provides visibility and insights for business operations.

### **Incident Severity and Analysis**

- RA uses AI/ML algorithms to provide detailed insights on why/how the incident has occurred. Based on this it also recommends actions that the admin must implement to fix the same.
- The incidents also tie in the clients impacted and displays a connection graph indicating the client connection events that led up to this incident.
- The analysis also includes multiple time graphs, when the incident started, the duration, number of failures and clients affected measured against time. Each of this is auto-assigned a severity based on the impacted clients, duration, scope of problem, and issue type.
- Mist doesn't have a comprehensive page for incident details.
- The success/failure in connectivity or infrastructure is displayed numerically and each sub-category under it is also a ratio or percent contributing to it.

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- www.ams.net
- Mist requires the additional Virtual Network Assistant for responsive action recommendations.
- Mist does not provide any severity classification.

### Total cost of ownership

- RUCKUS Analytics is an additional subscription on a per-AP, per-Switch\* basis with a multi-year discounted pricing model.
- All reports up to 12 months historical data, analytics and troubleshooting capabilities included in the single subscription.
- Mist's base subscription covers Wi-Fi Assurance only. Virtual Network Assistant for troubleshooting,
   Wired Assurance, WAN Assurance and Premium Analytics are each an additional subscription.
- Mist offers no multi-year discounts for long-term commitments.

### **Data Explorer**

- RUCKUS Analytics has a versatile tool, Data Explorer, that allows creation of fully customizable dashboards using drag-and-drop UI. Each dashboard can display variety of data collected during past 12 months. It can be presented in multiple different formats i.e., charts, tables, heatmaps, for nearly two dozen data types.
- Data buckets include Clients, Applications, WLANs, APs, switches, etc.
- Data display in Mist is through fixed workflows for Wi-Fi/Wired/WAN Assurance under each SLE.
- Basic report types in grid format with a fixed set of metrics to choose from.
- 7 days of historical data available under various Assurance instances.

### Data retention interval

- RUCKUS Analytics uses up to 90 days of data for Insight analysis and keeps up to 12 months of data for reporting.
- Mist has 30-day Reporting in the base subscription and 12 months with Premium Analytics.

### Flexible integration options

- RUCKUS Analytics can be integrated with SZ (on-prem/virtual) or RUCKUS Cloud deployment models.
- Mist is available as one option only integrated with Mist cloud.



### **Section 2**

### 01 - PROPOSAL FORM

PROJECT: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

LAKESIDE UNION SCHOOL DISTRICT

Pursuant to Request For Proposal (RFP) and related documents, <a href="mailto:the-undersigned-bidder">the-undersigned-bidder</a>, having familiarized himself/herself with the terms of the contract, the local conditions affecting the performance of the contract, the cost of the work at the location where the work will be performed, and the Contract Documents, <a href="mailto:proposes-and-agrees-to-perform">proposes-and-agrees-to-perform</a>, within the time stipulated, including all of its component parts, and everything required to be performed, and to provide and furnish any and all of the labor, materials, tools, expendable equipment, and all applicable taxes, utility and transportation services necessary to perform the contract and complete in a workmanlike manner all of the work required in connection with <a href="mailto:po23-22C.1">po23-22C.1</a>—loca3-22C.1 Lakeside Union School District Network Electronics all in strict conformity with the Specifications, and other Contract Documents, including Addendum No.'s <a href="mailto:locations-number-

### BASE BID - 0023-22C.1 Lakeside Union School District Network Electronics

The Bidder agrees to perform all work noted above, as described in the RFP and Project Documents for the lump sum of:

Seventy Two Thousand, Four Hundred Twelve Dollars and

Forty Three Cents Dollars (\$ 72, 412.43

(Amount Shall Be Shown in Both Words and Figures. In Case of a Discrepancy, The Amount Shown In Words Will Govern).

Bidder shall breakout the above Base Bid cost by Site for E-Rate Program funding allocation purposes:

Project will be awarded based on the evaluation criteria set forth herein. Price will be evaluated based on the sum total of the Base Bid, Basic Maintenance, and all Additive Alternates.

The bidder agrees that upon receipt of Owner's "Notice to Proceed", he/she will provide all required documents within ten (10) calendar days after the documents are presented for execution.

The bidder has carefully examined the RFP documents and specifications for this project that were prepared and furnished by the OWNER and acknowledges their sufficiency.

It is understood and agreed that the work under the contract shall be commenced by the bidder, if awarded the contract, on the date to be stated in the OWNER'S **Notice to Proceed**.

MAMIE OF BIDDER.	AMS.NET The.
FULL NAME OF ALL PARTNERS OR LEGAL NAME OF CORPORATION	- €
	OR PRINT)
AUTHORIZED CONTACT <i>I</i> BID PREPREPRESENTATIVE:	Sean Harrington
BUSINESS ADDRESS:	2 Commerce Way, Livermore CA 94551  OR PRINT)
559-547-28	sharrington@ams.net
BY: (SIGNATURE IN INK)	Diana Monagnan Secretary (Type Or Print Name Of Title And Signature)
'I declare, under penalty of perjury, the declaration was executed on	nat the information provided, and representations made in this bid are true and current and that this bid are true and current and the bid are true and true are true ar
PRESIDENT OF CORPORATION: (SIGNATURE	2/23/2002 DATE
SECRETARY OF CORPORATION:	PRINT NAME AND TITLE OF SIGNATURE)  2 23 202
(SIGNATURE) (TYPE OR	DATE  O MONGONAN SECRETARY  PRINT NAME AND TITLE OF SIGNATURE)
CALIFORNIA STATE CONTRACTOR'S LICENSE NO.:	763508 FEDERAL I.D. NO: 94-3291626
LICENSE EXPIRATION DATE:	4/30/2022
TYPE OF LICENSE:	C7
PUBLIC WORKS CONTRACTOR'S REGISTRATION NO:	1000001046
LICENSE IN THE NAME OF:	(Type Or Print Name)

CORPORATE SEAL: (IF APPLICABLE)

### 03 - ELECTRONIC ITEM 21 ATTACHMENT SHEET

Bidder shall provide itemized pricing for all equipment to be included in this Bid Response.

Due to filing requirements, an electronic copy will be required at the time of bid.

Acceptable formats: thumb drive, and digital copy. Files will be returned in the same format as the published Item 21, no exceptions. Failing to comply with these requirements will be considered for bid dismissal.

Bidder shall include a Description, Part Number, Quantity and Price for each relevant item included in their bid. Bidder shall provide the Labor cost as a line item.

Provided by the "Service Provider"

Please reference attached Item 21 in email response.

### 04 - SUBSTITUTION LISTING

PROJECT: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

TO: Lakeside Union School District ("OWNER")

Bidder proposes [check one]:

 Pursuant to bidding and contract requirements for the work titled: Project: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

The contract sum, proposed by the undersigned on the Proposal Form, is for the work as described in the Request for Proposal, and otherwise defined in the Contract Documents. However, the undersigned proposes the following substitutions, which were not Pre-Approved prior to the bid date, for the Owner's consideration. All substitutions must be listed on this form and submitted with the bid or they will not be reviewed.

Complete, attaching additional sheets as necessary:

\_\_\_\_ no substitutions.

x the following substitutions:

Specified Product or Material	Proposed Substitution
Juniper EX2300-48P	Ruckus ICX7150-48PF-4x10GR
Juniper EX2300-24P	Ruckus ICX7150-24P-4x10GR
Juniper EX4400-48F	Ruckus ICX7550-48F-E2
Juniper S-EX-A-C3-5-DN	Ruckus CLD-S71E-5001
Juniper JPSU-550-C-AC-AFO	Included with Switch
Juniper SFP-1G-SX-C	Ruckus E1MG-SX-OM-T
Juniper SFPP-10G-LR-C	Ruckus 10G-SFPP-LR-S
Juniper EX-SFP-10GE-DAC-1M	Ruckus 10G-SFPP-TWX-P-0101
Juniper EX2300-VC	Included with Switch
Juniper SFP-1G-LX-C	Ruckus E1MG-LX-OM-T

- All bids should be calculated and submitted on the assumption that substitution requests will not be approved.
- 4. Bidder hereby certifies that the requested substitutions are equal or better in all respects to what is specified, unless otherwise noted. Bidder will supply all documentation to support this claim as attachments to the Substitution Listing with their bid. Failure to provide adequate documentation may result in the disqualification of the bid response.

SIGNATURE MUST BE IDENTICAL TO THAT PROVIDED ON BID FORM

BIDDER: AMS. NET

### <u>06 - NONCOLLUSION AFFIDAVIT</u>

PROJECT: OWNER:	0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS LAKESIDE UNION SCHOOL DISTRICT
	(Public Contract Code Section 7106)
State of Californ	) s
County Of	rameda)
the bidder has not colluded, conspired the bidder has not of the bidder or any advantage against bid are true; and, for thereof, or divulge	of the party making the foregoing bid, that the bid is not made in the interest of, or on behalf of, any in, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly or indirectly or indirectly or indirectly or indirectly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price or other bidder, or to fix any overhead, profit or cost element of the bid price, or of that of any other bidder, or to secure any the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the urther, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents and information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, ization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.
	NOTARY FOR NONCOLLUSION AFFIDAVIT
Subscrib	ped and sworn to (or affirmed) before me this day 2123, 2022.  Mayon Mayon (Bignature Of Notary)
[SEAL OF NOTA	Maria Reservices land

MORGAN ROSE MONAGHAN Notary Public - California Alameda County Commission # 2250308 My Comm. Expires Jul 16, 2022

### CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

19/6/19/20/06/19/19/19/19/19/19/19/19/19/19/19/19/19/	Grandisisisisisisisisisisisisisisisisisisis		
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.			
State of California  County of Alameda  On February 23, 2002 before me, Morgan Rose Monaghan, Notary Public  Date  Personally appeared  Name(s) of Signer(s)  who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their			
authorized capacity(ies), and that by his/her/their signatupon behalf of which the person(s) acted, executed the	ature(s) on the instrument the person(s), or the entity e instrument.		
MORGAN ROSE MONAGHAN Notary Public - California Alameda County Commission # 2250308 My Comm. Expires Jul 16, 2022	I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.  WITNESS my hand and official seal.		
Place Notary Seal and/or Stamp Above	Signature of Notary Public ONAL		
Completing this information can d	deter alteration of the document or form to an unintended document.		
Description of Attached Document			
Title or Type of Document:			
Document Date:			
Signer(s) Other Than Named Above:			
Capacity(ies) Claimed by Signer(s)  Signer's Name:  Corporate Officer - Title(s):  Partner - Limited General Individual Attorney in Fact Guardian of Conservator Other:  Signer is Representing:	Signer's Name: Corporate Officer - Title(s): Partner - □ Limited □ General □ Individual □ Attorney in Fact □ Trustee □ Guardian of Conservator □ Other: Signer is Representing:		

### 09 - BIDDER'S QUALIFICATION FORM

0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

The prospective Bidder shall furnish all the following information accurately and completely. Failure to comply with this requirement fully and completely may result in rejection of any bid submitted. Additional sheets may be attached if necessary. "You" or "your" as used in this

LAKESIDE UNION SCHOOL DISTRICT

PROJECT:

OWNER:

question	naire refers to the Bidder's firm and standing of additional information depending of	any of its owners, officers, directors, shareholders, parties, or principals. Owner has discretion on the project.
1.	Firm name and address:	AMS.NET The 502 Commerce Way Livermore CA 94551
2.	Telephone:	559-547-2867
3.	Type of firm: (check one) Individu	al Partnership Corpx
4.	Names and titles of all principals of Robert Tocci	President
5.	Number of years as contractor. current form:33_ Years	Include only years in this type of construction and only the years with the current entity in its
6.	Years of experience your firm has	in public school construction work:
	As prime contractor:33As	subcontractor:
7.	In the last five years has your include information pertaining to parame, and address of surety and	firm or any of its principals defaulted so as to cause a loss to a surety? Response must brincipals' associations outside of the firm bidding this Project. If the answer is yes, give date, details.
8.	In the last five years have you must include information pertainin	or any of your principals been assessed liquidated damages for any project? Response g to principals' associations outside of the firm bidding this Project. If yes, explain:

9.	ques	stions relating to cipals' association	have you or any of your principals been in litigation or a a public construction project and/or an E-Rate project? noutside of the firm bidding this Project. If yes, provide es, as necessary.	Response must include information pertaining to
	-			 
10.	pert	ne last five years aining to principational pages, as	s have you or any of your principals ever failed to compals' association outside of the firm bidding this Project. necessary.	plete a project? Response must include information If yes, provide owner's name and details. Attach
	_	No		<del>-</del>
11.	Ехр	perience		_
	a. 	Provide the total winning Contract	al number of the specified Systems that you have installed ctor will be responsible to provide a complete list of refere	I (not using subcontractors) in the last 3 years. (The noce to confirm this number if asked)
	b.	11b. Provide th Market in the la number if aske	ne number of the specified Systems that you have installed ast 3 years. (The winning Contractor will be responsible to d)	ed (not using subcontractors) in the Education K-12 o provide a complete list of reference to confirm this
		5+		<del>_</del>
12.	Sei	rvice		
	a.	Provide the Ad	dress of the Service Facility that will be responsible for se	rvice calls for this project:
		Address	1155 East North Ave Suite 106	_
		City	Fresno	<del>-</del>
		State Zip	CA 93725	_ _
	b.	Provide the nu call-ins. (The v if asked)	umber of Manufacture Certified Technicians that who are vinning Contractor will be responsible to provide copies o	employed by you, which are responsible for service the Manufacture Certificates to confirm this number
		5+		<del></del> 8
	c.	12c. Provide t including but n	he hourly charge that you will charge the Owner for No ot limited to travel charges and hourly minimum charges.	on-Warranty service calls. Price will include all fees
		\$250		<u> </u>

### 13. Additional Features

a.	Provide any additional information that you deem as pertinent to this project that will reflect an ROI (Return On Investment) for the specified system that you are proposing to install.
_	AMS.NET believes the proposed RUCKUS system
_	is equal to or better than the specified
	Juniper system.
b.	Provide any additional information that you deem as pertinent to this project that demonstrates additional functions and features of the specified system that you are proposing to install.
	Please see attached sub sheet and data sheets.
_	

14. List of References: Provide information on the three largest E-Rate projects your company has completed in the last five years that comes closest to matching the scope of this RFP. If Contractor has not completed an E-Rate project, provide the largest three "Educational Market" projects your company has completed in the last five years. Contractor may include additional documentation.

### Project #1

Project Name:	Madera Unified School District
Contact Information: Address:	1902 East Howard RD Madera CA
Phone Number:	559-675-4500
Contact Person: Name: Title: Phone #:	Mary DeLaCerda Administrative Assistant 559-664-8003
Description of Project:	Ruckus Wireless Project for Madera USD
Project Start Date:	3/2021
Project Completion Date:	6/2021
Contract amount:	\$411,000
Architect/Engineer: Firm Name:	Madera USD
Contact Person: Name:	Joe Halford
Title: Phone #:	Director 559-664-8003

### Project #2

Project Name:	Lemoore Union High School District
Contact Information: Address:	5 Powell Ave Lemoore CA 93245
Phone Number: Contact Person: Name: Title: Phone #:	559-924-6610  Kevin LeMaster  Technology Coordinator 559-924-1051
Description of Project:	Ruckus wireless for Lemoore Union High School District.
Project Start Date:	8/21
Project Completion Date:	11/21
Contract amount:	\$13,000
Architect/Engineer: Firm Name: Contact Person: Name: Title: Phone #:	Kevin LeMaster Technology Coordinator 559-624-6610

### Project #3

Project Name:	College of Marin
Contact Information: Address:	835 College Ave Kentfield CA 94904
Phone Number: Contact Person: Name: Title: Phone #:	415-259-7086  Patrick Ekoue-totou CIO 415-457-8811
Description of Project:	Ruckus switching for College of Marin campuses.
Project Start Date:	8/2018
Project Completion Date:	9/2018
Contract amount:	\$54,000
Architect/Engineer: Firm Name: Contact Person: Name: Title: Phone #:	College of Marin  Patrick Ekoue-totou  CIO  415-457-8811

### 10 - MANUFACTURE'S CERTIFCATION FORM

0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

Please provide the following information concerning any Manufacture's Certifications that apply to the material and scope as defined in the

Project Specifications and Bid the Lakeside Union School Di		chool District Network Electronics <u>FY2022</u> E-Rate Project for
Certification #1 Name of Manufacturer	Ruckus/Commscope	
Certification Expiration Date	2/2023	
Certification #2 Name of Manufacturer	,	
Certification Expiration Date		
Certification #3 Name of Manufacturer Certification Expiration Date		
Certification #4 Name of Manufacturer Certification Expiration Date		ā
Certification #5 Name of Manufacturer Certification Expiration Date		-

Please attach a copy(ies) of your company's Manufacturer's Certification(s).

LAKESIDE UNION SCHOOL DISTRICT

PROJECT: OWNER:

## COMMSCOPE

## PartnerPR0\*

NETWORK

# CERTIFICATE OF AUTHORIZATION

PROUDLY RECOGNIZES COMMSCOPE

### AMS.NET

as an Elite Ruckus Networking Solution Provider in the CommScope PartnerPRO Network February 14, 2022 COMMSCOPE Solution Provider

RUCKUS

Dieter Verdegem, VP, dlobal Customer Experience

Bart Giordano, SVP, RUCKUS Global Sales

### 14 - CONTRACTOR AGREEMENT

THIS AGREEMENT is entered into by and between the Lakeside Union School District, hereinafter called "District", and				
AMS . NET TOE, hereinafter called "Contractor,". District and Contractor are sometimes individually referred to as "Party" and collectively as "Parties." This Agreement is made with reference to the following facts:				
WHEREAS, The District published a Request for Proposal and seeks to procure the work covered in the Agreement in accordance with Public Contract Code 20118.2;				
WHEREAS, The Contractor understands that the Agreement is contingent on the District's receipt of federal and/or state funds for the work covered in this Agreement. If the District does not receive adequate federal and/or state funds, this Agreement shall be null and void at the District's request. In the event that the Agreement is rendered void, the District will not be liable for any costs incurred by the Contractor prior to the issuance of a Notice to Proceed; and				
NOW, THEREFORE, the Parties, in consideration of the mutual covenants hereinafter set forth, agree as follows:				
<ol> <li>Contract Documents. The complete contract includes all of the "Project Documents" provided in the Request for Proposal, including all modifications, addenda and amendments thereto. The Contract Documents are complementary and what is called for by anyone shall be as binding as if called for by all.</li> </ol>				
<ol> <li>Scope of Work. The Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, and material necessary to perform and complete, in a good workmanlike manner, the work in strict accordance with the Request for Proposal 0023-22C.1 0023- 22C.1 Lakeside Union School District Network Electronics.</li> </ol>				
It is understood and agreed that the work shall be performed and completed as required in strict accordance to the Contract Documents including, without limitation, the Drawings and Specifications, under the direction and supervision of, and subject to, the approval of the District or its authorized representative.				
<ol> <li>Total Contract Price – As full consideration for the faithful performance of the agreement, District shall pay to Contractor, subject to any additions or deductions as provided in the Contract Documents, the sum of:</li> </ol>				
Total sum of Base Bid				
Seventy Two Thousand, Four Hundred Twelve Dollars and Forty Three Cents  Dollars (\$ 72,412.43				
CONTRACTOR LEAVE BLANK TO BE FILLED IN BY THE OWNER				
Total sum of Base Bid				

- Work to Commence It is hereby understood and agreed that the wok under this Agreement shall not commence until after the
  issuance of the Notice to Proceed. No work may commence until after <u>April 1</u> of the previous funding year per the requirements
  of the E-Rate Program.
- 3. <u>Time for Completion</u> Project must be completed within ninety (90) consecutive calendar days from the date specified in the District's Notice to Proceed. Agreement may be extended if mutually agreed on by both parties in writing.

Should the Contractor fail to complete this Contract, and the Work provided herein, within the time fixed for completion, due allowance being made for the contingencies provided for herein, the Contractor shall become liable to the District for all loss and damage that the District may suffer on account thereof.

Dollars (\$

- 4. Coordination of Work The Contractor shall coordinate its work with the Work of all other contractors. The District shall not be liable for delays resulting from Contractor's failure to coordinate its Work with other contractors in a manner that will allow timely completion of Contractor's Work. Contractor shall be liable for delays to other contractors caused by Contractor's failure to coordinate its Work with the work of other contractors.
- 5. Loss Or Damage The District and its authorized representatives shall not in any way or manner be answerable or suffer loss, damage, expense, or liability for any loss or damage that may happen to the Work, or any part thereof, or in or about the same during its construction and before acceptance, and the Contractor shall assume all liabilities of every kind or nature arising from the Work, either by accident, negligence, theft, vandalism, or any cause whatever; and shall hold the District and its authorized representatives harmless from all liability of every kind and nature arising from accident, negligence, or any cause whatever.
- 6. Payment On or before the twentieth (20th) day of each month, Contractor shall submit to the District an itemized application for payment for Work completed during the prior month. The application shall include all information required by the District and shall be in a format approved by the District.

Contractor may be required to furnish a detailed schedule of values upon request of the District and in such detail and form as the District shall request, showing the quantities, unit prices, overhead, profit, and all other expenses involved in order to provide a basis for determining the amount of progress payments. No progress payments will be made for Work not completed in accordance with this Agreement or for any amounts withheld by the District due to punch list items, disputed work or stop notices, upon final completion.

District shall make said payment of any balance due to the Contractor promptly upon filing the Notification of Completion for the Project, receipt of a release of lien and claims from the Contractor pursuant to Civil Code section 3262, and its acceptance of the Work. In the event that the District is required to withhold amounts from payment due to punch list items, disputed work or stop notices, Contractor shall execute a Conditional Waiver and Release upon Final Payment on the form prescribed in Civil Code section 3262 and shall execute an Unconditional Waiver and Release upon Final Payment on the form prescribed in Civil Code Section 3262, upon the District's payment of any amounts originally withheld from payment. Pursuant to California law, should a dispute arise between the Contractor and District, including amounts withheld for punch list items, District may withhold from the payment an amount not to exceed one hundred and fifty percent (150%) of the disputed amount and/or the amount of the punch list work.

The Contractor to comply with the SLD's Form 474 "Service Provider Invoicing" (SPI) method for this contract. Contractor will invoice USAC directly for the committed funding amount of "eligible" equipment and services. The Owner will only be responsible for their percentage of the "eligible" equipment and services and 100% of "ineligible" equipment and services. A copy of the Form 474 will be sent to the Project Administrator, for approval, prior to be sent to USAC.

In the event that the Owner authorizes the Service Provider to begin service prior to filing a Form 486 (Receipt of Service Confirmation Form), the Owner agrees to pay the Service Provider in full for the discounted and undiscounted amount of the accepted service(s) received. The Owner shall, at their sole discretion, seek reimbursement for the discounted amount of the service provided from USAC. The Owner shall do so by preparing and submitting a Form 472 Billed Entity Applicant Reimbursement (BEAR) to USAC. Service Provider agrees to remit any and all reimbursement payments received by the Service Provider as a result of a Form 472 filed by the Owner, within 20 business days after receipt of funds released by USAC.

- 7. Additional Work To the extent that additional work is required for the proper completion of the Work due to unforeseen circumstances and/or site conditions and is, therefore, not set forth in Contract Documents, the Parties may execute a change order to this Agreement setting forth the scope of such additional work, the time for completion for such additional work and the amount of additional compensation.
- Assignment of Contract Neither Party shall not assign, transfer, convey, or otherwise dispose of this Agreement or of his/her right, title of interest in or to the same or any part thereof without previous consent in writing from the other Party's authorized representative.
- Suspension/Termination of Contract If Contractor fails to commence work as provided in the Agreement, or fails to make delivery
  of materials promptly as ordered and such delivery is so late as to amount to gross negligence or willful misconduct, or if in the
  opinion of District's authorized representative, Contractor is not carrying out the provisions of the Agreement in their true intent and

meaning, written notice will be served on Contractor to provide, within a specified time to be fixed by District's authorized representative, for satisfactory compliance with this Agreement. If Contractor neglects or refuses to comply with such notice within the time therein fixed, he/she shall not thereafter exercise any rights under said Agreement or be entitled to receive any of the benefits thereof, except as hereinafter provided, and District's authorized representative may with the approval of the District Board perform any part of the Project or purchase any or all of the material included in the Agreement or required for the completion thereof, or take possession of all or any part of the machinery, tools, appliances, materials and supplies used in the Project covered by the Agreement or that have been delivered by or on account of Contractor for use in connection therewith, and the same may be used either directly by District or by other parties for it, in the completion of the Project.

District has the right to terminate or abandon any portion or all of the Project under this agreement by giving ten (10) calendar days written notice to Contractor and its Surety. In such event, District shall be immediately given title and possession to all original field notes, drawings and specifications, written reports and other documents produced or developed for that portion of the Project completed and/or being abandoned. District shall pay Contractor the reasonable value of services rendered for any portion of the Project completed prior to termination. If said termination occurs prior to the issuance of the Notice to Proceed, the District shall not be liable to the Contractor for any costs or amounts whatsoever under this Agreement. If said termination occurs prior to completion of any task for the Project for which a payment request has not been received, the charge for services performed during such task shall be the reasonable value of such services, based on an amount mutually agreed to by District and Contractor of the portion of such task completed but not paid prior to said termination. District shall not be liable for any costs other than the charges or portions thereof which are specified herein. Contractor shall not be entitled to damages or compensation for termination of the Project.

Contractor may terminate its obligation to provide further services under this Agreement upon thirty (30) calendar days' written notice to District only in the event of substantial failure by District to perform in accordance with the terms of this agreement through no fault of Contractor.

- 10. Procedure for Resolving Disputes The parties to this Agreement are subject to the provisions of Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3 of the Public Contract Code (as amended by the Statutes of 1990, Chapter 1414, effective January 1, 1991), which requires compliance with the following procedures to resolve any claim by the contractor of \$375,000 or less regarding an extension of time, a change order, extra work, or any other disputed amount: If following the meet and confer conference the claim or any portion remains in dispute, the claimant must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.
- 11. <u>Indemnification</u> To the fullest extent permitted by law, Contractor shall indemnify, defend and hold harmless District against any and all claims involving any type of property damage or personal injury, including death, that may be asserted by any person or type of entity, arising out of or in connection with the performance of work, both on and off the job site; provided however, Contractor shall only be liable to the extent of its negligence or willful misconduct. Contractor will defend any action filed in connection with any of said claims, damages, penalties, obligations or liabilities and will pay all costs and expenses, including attorney fees in connection therewith. Contractor will promptly pay any judgment rendered against Contractor or District arising out of or in connection with such work, operation or activities of Contractor hereunder and Contractor agrees to save and hold District harmless there from. District may retain to the extent it deems necessary, the money due to Contractor under and by virtue of this Agreement until disposition has been made of such actions or claims for damages as specified herein above.
- 12. <a href="Interpretation">Interpretation</a> In interpreting this Agreement, it shall be deemed that it was prepared jointly by the Parties with full access to legal counsel of their own. No ambiguity shall be resolved against any party on the premise that it or its attorneys were solely responsible for drafting this Agreement or any provision thereof.
- 13. Governing Law This Agreement shall be construed in accordance with and be governed by the laws of the State of California. The Parties agree that Kern County, California is the proper venue for enforcement of the terms of this Agreement. The prevailing party in any action to enforce this Agreement or otherwise concerning the terms of the settlement of the action shall be awarded costs and attorney's fees.
- 14. Equipment Warranty Contractor shall maintain a guarantee that all items delivered under this Agreement are protected against imperfections of materials and/or workmanship during the period of the Agreement. Within thirty (30) days of completion of the Project, the Contractor shall assign any manufacturers or other equipment warranties to the District and shall provide the District with any relevant document(s) thereto.

Should the contract warrant an additional term above the already established term.

- 1. <u>Integrated Agreement</u> This Agreement embodies the entire understanding between the Parties pertaining to the matters described herein. Each party acknowledges that no party, agent or representative of the other party has made any promise, representation, or warranty, express or implied, not expressly contained in this Agreement, that induced the other party to sign this document. No modification of this Agreement shall be valid unless agreed to in writing by the Parties. This Agreement may be executed in separate counterparts, the whole of which shall constitute a binding agreement. Facsimile or E-mail signatures, when received, shall have the same force and effect as original signatures.
- 2. <u>Contract Expiration</u> This agreement expires on the date listed below. The contract may be extended upon agreement by both parties. Contract Expiration Date: **September 30, 2022**

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered as of the Effective Date set forth in the introductory paragraph above.

"DISTRICT"	"CONTRACTOR"
Lakeside Union School District	AMS.NET, Inc.
Ву:	By: Sland Moneyan
Name:	Name: Diana Mmaghan
Title:	Title: Secretary
Date:	Date: 2/23/2022

### 14 - CONTRACTOR AGREEMENT

THIS AGREEMENT is entered	into by	and	between	the	Lakeside U	Inion	School	District,	hereinafter	called	"District",	and
individually referred to as "Party" ar	nd collectiv	ely as	"Parties."	' This	_, hereinafter Agreement is	called s mad	I "Contra	ctor,". Di	strict and Co	ntractor	are somet	imes

WHEREAS, The District published a Request for Proposal and seeks to procure the work covered in the Agreement in accordance with Public Contract Code 20118.2;

WHEREAS, The Contractor understands that the Agreement is contingent on the District's receipt of federal and/or state funds for the work covered in this Agreement. If the District does not receive adequate federal and/or state funds, this Agreement shall be null and void at the District's request. In the event that the Agreement is rendered void, the District will not be liable for any costs incurred by the Contractor prior to the issuance of a Notice to Proceed; and

NOW, THEREFORE, the Parties, in consideration of the mutual covenants hereinafter set forth, agree as follows:

- Contract Documents. The complete contract includes all of the "Project Documents" provided in the Request for Proposal, including all modifications, addenda and amendments thereto. The Contract Documents are complementary and what is called for by anyone shall be as binding as if called for by all.
- Scope of Work. The Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, and material necessary to perform and complete, in a good workmanlike manner, the work in strict accordance with the Request for Proposal 0023-22C.1 Lakeside Union School District Network Electronics.

It is understood and agreed that the work shall be performed and completed as required in strict accordance to the Contract Documents including, without limitation, the Drawings and Specifications, under the direction and supervision of, and subject to, the approval of the District or its authorized representative.

Total Contract Price – As full consideration for the faithful performance of the agreement, District shall pay to Contractor, subject to any additions or deductions as provided in the Contract Documents, the sum of:

### Total sum of Base Bid

Sevent	y Two	Thousand,	Four	Hundred	Twelve	Dollare	and
Forty ?	Three	Cents		7.72		DOTIGIS	and

Dollars (\$ 72,412.43

CONTRACTOR LEAVE BLANK	TO BE FILLED IN BY THE OWNER

Total sum of Base Bid

Dollars (\$

- Work to Commence It is hereby understood and agreed that the wok under this Agreement shall not commence until after the
  issuance of the Notice to Proceed. No work may commence until after April 1 of the previous funding year per the requirements
  of the E-Rate Program.
- Time for Completion Project must be completed within ninety (90) consecutive calendar days from the date specified in the District's Notice to Proceed. Agreement may be extended if mutually agreed on by both parties in writing.

Should the Contractor fail to complete this Contract, and the Work provided herein, within the time fixed for completion, due allowance being made for the contingencies provided for herein, the Contractor shall become liable to the District for all loss and damage that the District may suffer on account thereof.

- 4. Coordination of Work The Contractor shall coordinate its work with the Work of all other contractors. The District shall not be liable for delays resulting from Contractor's failure to coordinate its Work with other contractors in a manner that will allow timely coordinate its Work with the work of other contractors.
- 5. Loss Or Damage The District and its authorized representatives shall not in any way or manner be answerable or suffer loss, damage, expense, or liability for any loss or damage that may happen to the Work, or any part thereof, or in or about the same during its construction and before acceptance, and the Contractor shall assume all liabilities of every kind or nature arising from the Work, either by accident, negligence, theft, vandalism, or any cause whatever; and shall hold the District and its authorized representatives harmless from all liability of every kind and nature arising from accident, negligence, or any cause whatever.
- Payment On or before the twentieth (20th) day of each month, Contractor shall submit to the District an itemized application for payment for Work completed during the prior month. The application shall include all information required by the District and shall be in a format approved by the District.

Contractor may be required to furnish a detailed schedule of values upon request of the District and in such detail and form as the District shall request, showing the quantities, unit prices, overhead, profit, and all other expenses involved in order to provide a basis for determining the amount of progress payments. No progress payments will be made for Work not completed in accordance with this Agreement or for any amounts withheld by the District due to punch list items, disputed work or stop notices, upon final completion.

District shall make said payment of any balance due to the Contractor promptly upon filing the Notification of Completion for the Project, receipt of a release of lien and claims from the Contractor pursuant to Civil Code section 3262, and its acceptance of the Work. In the event that the District is required to withhold amounts from payment due to punch list items, disputed work or stop notices, Contractor shall execute a Conditional Waiver and Release upon Final Payment on the form prescribed in Civil Code section 3262 and shall execute an Unconditional Waiver and Release upon Final Payment on the form prescribed in Civil Code Section 3262, upon the District's payment of any amounts originally withheld from payment. Pursuant to California law, should a dispute arise between the Contractor and District, including amounts withheld for punch list items, District may withhold from the payment an amount not to exceed one hundred and fifty percent (150%) of the disputed amount and/or the amount of the punch list work.

The Contractor to comply with the SLD's Form 474 "Service Provider Invoicing" (SPI) method for this contract. Contractor will invoice USAC directly for the committed funding amount of "eligible" equipment and services. The Owner will only be responsible for their percentage of the "eligible" equipment and services and 100% of "ineligible" equipment and services. A copy of the Form 474 will be sent to the Project Administrator, for approval, prior to be sent to USAC.

In the event that the Owner authorizes the Service Provider to begin service prior to filing a Form 486 (Receipt of Service Confirmation Form), the Owner agrees to pay the Service Provider in full for the discounted and undiscounted amount of the accepted service(s) received. The Owner shall, at their sole discretion, seek reimbursement for the discounted amount of the service provided from USAC. The Owner shall do so by preparing and submitting a Form 472 Billed Entity Applicant Reimbursement (BEAR) to USAC. Service Provider agrees to remit any and all reimbursement payments received by the Service Provider as a result of a Form 472 filed by the Owner, within 20 business days after receipt of funds released by USAC.

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- Assignment of Contract Neither Party shall not assign, transfer, convey, or otherwise dispose of this Agreement or of his/her right, title of interest in or to the same or any part thereof without previous consent in writing from the other Party's authorized representative.
- 9. <u>Suspension/Termination of Contract</u> If Contractor fails to commence work as provided in the Agreement, or fails to make delivery of materials promptly as ordered and such delivery is so late as to amount to gross negligence or willful misconduct, or if in the opinion of District's authorized representative, Contractor is not carrying out the provisions of the Agreement in their true intent and

meaning, written notice will be served on Contractor to provide, within a specified time to be fixed by District's authorized representative, for satisfactory compliance with this Agreement. If Contractor neglects or refuses to comply with such notice within the time therein fixed, he/she shall not thereafter exercise any rights under said Agreement or be entitled to receive any of the benefits thereof, except as hereinafter provided, and District's authorized representative may with the approval of the District Board perform any part of the Project or purchase any or all of the material included in the Agreement or required for the completion thereof, or take possession of all or any part of the machinery, tools, appliances, materials and supplies used in the Project covered by the Agreement or that have been delivered by or on account of Contractor for use in connection therewith, and the same may be used either directly by District or by other parties for it, in the completion of the Project.

District has the right to terminate or abandon any portion or all of the Project under this agreement by giving ten (10) calendar days written notice to Contractor and its Surety. In such event, District shall be immediately given title and possession to all original field notes, drawings and specifications, written reports and other documents produced or developed for that portion of the Project completed and/or being abandoned. District shall pay Contractor the reasonable value of services rendered for any portion of the Project completed prior to termination. If said termination occurs prior to the issuance of the Notice to Proceed, the District shall not be liable to the Contractor for any costs or amounts whatsoever under this Agreement. If said termination occurs prior to completion of any task for the Project for which a payment request has not been received, the charge for services performed during such task shall be the reasonable value of such services, based on an amount mutually agreed to by District and Contractor of the portion of such task completed but not paid prior to said termination. District shall not be liable for any costs other than the charges or portions thereof which are specified herein. Contractor shall not be entitled to damages or compensation for termination of the Project.

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- 10. Procedure for Resolving Disputes The parties to this Agreement are subject to the provisions of Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3 of the Public Contract Code (as amended by the Statutes of 1990, Chapter 1414, effective January 1, 1991), which requires compliance with the following procedures to resolve any claim by the contractor of \$375,000 or less regarding an extension of time, a change order, extra work, or any other disputed amount: If following the meet and confer conference the claim or any portion remains in dispute, the claimant must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.
- 11. Indemnification To the fullest extent permitted by law, Contractor shall indemnify, defend and hold harmless District against any and all claims involving any type of property damage or personal injury, including death, that may be asserted by any person or type of entity, arising out of or in connection with the performance of work, both on and off the job site; provided however, Contractor shall only be liable to the extent of its negligence or willful misconduct. Contractor will defend any action filed in connection with any of said claims, damages, penalties, obligations or liabilities and will pay all costs and expenses, including attorney fees in connection therewith. Contractor will promptly pay any judgment rendered against Contractor or District arising out of or in connection with such work, operation or activities of Contractor hereunder and Contractor agrees to save and hold District harmless there from. District may retain to the extent it deems necessary, the money due to Contractor under and by virtue of this Agreement until disposition has been made of such actions or claims for damages as specified herein above.
- 12. <a href="Interpretation">Interpretation</a> In interpretation In interpreting this Agreement, it shall be deemed that it was prepared jointly by the Parties with full access to legal counsel of their own. No ambiguity shall be resolved against any party on the premise that it or its attorneys were solely responsible for drafting this Agreement or any provision thereof.
- 13. Governing Law This Agreement shall be construed in accordance with and be governed by the laws of the State of California. The Parties agree that Kern County, California is the proper venue for enforcement of the terms of this Agreement. The prevailing party in any action to enforce this Agreement or otherwise concerning the terms of the settlement of the action shall be awarded costs and attorney's fees.
- 14. Equipment Warranty Contractor shall maintain a guarantee that all items delivered under this Agreement are protected against imperfections of materials and/or workmanship during the period of the Agreement. Within thirty (30) days of completion of the Project, the Contractor shall assign any manufacturers or other equipment warranties to the District and shall provide the District with any relevant document(s) thereto.

Should the contract warrant an additional term above the already established term.

- 1. Integrated Agreement This Agreement embodies the entire understanding between the Parties pertaining to the matters described herein. Each party acknowledges that no party, agent or representative of the other party has made any promise, representation, or warranty, express or implied, not expressly contained in this Agreement, that induced the other party to sign this document. No modification of this Agreement shall be valid unless agreed to in writing by the Parties. This Agreement may be executed in separate counterparts, the whole of which shall constitute a binding agreement. Facsimile or E-mail signatures, when received, shall have the same force and effect as original signatures.
- 2. <u>Contract Expiration</u> This agreement expires on the date listed below. The contract may be extended upon agreement by both parties. Contract Expiration Date: **September 30, 2022**

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered as of the Effective Date set forth in the introductory paragraph above.

"DISTRICT"  Lakeside Union School District	"CONTRACTOR"  AMS.NET JOC.
Ву:	By: Stail Morashon
Name:	Name: Diana Monaghan
Title:	Title: Secretary
Date:	Date: 2 23 2022



### **Section 3**



## Project Cost Summary - Lakeside Union School District

## Project Information

Lakeside Union School District E-Rate 25 - Network Electronics - 96430

Project # 96430

February 23, 2022

Account Manager	Sean Harrington	sharrington@ams.net	(925) 245-4769
Accol	Sean	sharri	(922)

# C C C C C C C C C C C C C C C C C C C	Description	Subtotal	Est. Taxes	Total
AIMIN QUOTE #	Condition			
0_0000000	E-Rate 25 - Proi # 0023-22C.1 -Network Electronics - 96430	\$68,707.16	\$3,705.27	\$72,412.43
	Totals	\$68,707.16	\$3,705.27	\$72,412.43

Vendor: AMS.NET

Address: 502 Commerce Way, Livermore, CA 94551

Phone: 925-245-6100

SPIN: 143005880



502 Commerce Way, Livermore, CA 94551 925-245-6100 • 925-245-6150 Fax www.ams.net

### **Customer Price Quote**

Quote #	#Q-00060670
Project#	96430
Modified	2/22/2022
Account Mgr.	Sean Harrington
AM Phone	(925) 245-4769
AM Email	sharrington@ams.net
Inside Account Mgr.	Teri Edwards
IAM Phone	(925) 245-6149
IAM Email	tedwards@ams.net
Quote Exp.	3/23/2022

### Customer

Lakeside Union School District 14535 Old River Rd Bakersfield Ca, 93311-9756 US ATTN: Brian Beisigl

### Ship To

Lakeside Union School District 14535 Old River Rd Bakersfield, CA 93311-9756 ATTN: Brian Beisigl

### **Quote Description**

E-Rate 25 - Proj # 0023-22C.1 -Network Electronics - 96430

SPIN #143005880

Line	Item Description	Manufacturer	Qty	Unit Price	Extended Price
Ruc	kus ICX7550 48F Switch				
1	ICX7550-48F-E2 RUCKUS WIRELESS: ICX 7550 36-port 100/1000 Mbps SFP,12-port 1/10 Gbps SFP+ with 2-ports 40/100 Gbps Uplink/Stack QSFP28,module slot,two AC power supplies	Ruckus Wireless	2.00	\$5,998.00	\$11,996.00
2	E1MG-SX-OM-T 1000Base-SX SFP optic, MMF, LC connector, Optical Monitoring Capable, Industrial Temperature	Brocade	33.00	\$220.00	\$7,260.00
3	10G-SFPP-LR-S 10BASE LR, SFP+ OPTIC (LC) 10KM OVERSMF	Ruckus Wireless	2.00	\$162.43	\$324.86
4	E1MG-LX-OM-T 1000Base-LX SFP optic, SMF, LC connector, Optical Monitoring Capable, Industrial Temperature	Brocade	1.00	\$425.50	\$425.50
5	10G-SFPP-TWX-0101 DIRECT ATTACHED SFPP ACTIVE COPPER,1M,1-PACK	Ruckus Wireless	4.00	\$145.20	\$580.80
6	CLD-S71E-5001 RUCKUS WIRELESS: CLD 5yr Subs for 1 ICX7150 Switch, SLED	Ruckus Wireless	22.00	\$200.00	\$4,400.00

Ru	ckus ICX7150 48P 2x10G Switch				
7	ICX7150-48P-2X10G ICX 7150 Switch, 48x 10/100/1000 PoE+ po	Brocade	18.00	\$1,588.00	\$28,584.00



AMS.NET, Inc. 502 Commerce Way, Livermore, CA 94551 925-245-6100 • 925-245-6150 Fax www.ams.net

Ruckus ICX7150 24P 2x10G Switch							
8	ICX7150-24P-2X10G ICX 7150 Switch, 24x 10/100/1000 PoE+ ports, 2x 1G RJ45 uplink-ports, 2x 1G SFP and 2x 10G SFP+ uplink- ports upgradable to 4x 10G SFP+ with license 370W PoE budget, basic L3	Ruckus Wireless	2.00	\$968.00	\$1,936.00		

AM	AMS-Professional Services								
9	AMS-NI-LAN-BROCADE-CORE-STACK Labor: Brocade Core Switch Installation - Stackable	AMS.NET	2.00	\$1,600.00	\$3,200.00				
10	AMS-NI-LAN-BROCADE-EDGE-STACK Labor: Brocade Edge Switch Installation - Stackable	AMS.NET	20.00	\$500.00	\$10,000.00				

AMS FREIGHT							
11	AMS-FREIGHT Freight and Handling	None	1.00	\$0.00	\$0.00		

### Order Summary

Subtotal	\$68,707.16		
Adjustment	\$0.00		
Estimated Taxes	\$3,705.27		
Total	\$72,412.43		



502 Commerce Way, Livermore, CA 94551 925-245-6100 • 925-245-6150 Fax www.ams.net

### Terms and Conditions

- AMS.NET will require a Purchase Order referencing this Quote # or if a Purchase order is not provided, an authorized representative must sign this quote.
- 2. Payment terms are Net 30. An interest charge of 1.5% per month will be applied to all accounts past due, plus all costs of collection and reasonable attorneys fees. AMS.NET accepts all major credit cards. A convenience fee of 3.5% will be assessed. Customer agrees to accept multiple invoices for projects that cover multiple sales. In the event that a site's readiness is delayed by the customer, customer agrees to accept and pay invoices that reflect equipment and services already received.
- 3. Items sold by AMS.NET, Inc. and shipped to destinations in California are subject to sales tax. If an item is subject to sales tax in the state to which the order is shipped, tax is generally calculated on the total selling price of each individual item. In accordance with state tax laws, the total selling price of an order will generally include shipping and handling charges and itemlevel discounts. The amount of tax charged on your order will depend upon many factors including, but not limited to, the type of item(s) purchased, and the source and destination of the shipment. Factors can change between the time you place an order and the time an invoice is sent, which could affect the calculation of sales taxes. The amount appearing on your proposal as 'Estimated Sales Tax' may differ from the sales taxes ultimately charged. Shipping charges and sales tax will be added to this order when invoiced and the customer agrees to pay these charges.
- 4. All companies with tax exemption must present a valid Tax Exempt form. If Customer is tax exempt or if tax exempt form is not provided then customer agrees to pay all applicable taxes.
- 5. All shipments are FOB Origin or Pre-paid and shipped to Dock. Any Special shipping requirements must be clearly stated on all PO's (i.e. inside delivery). If inside Delivery or Lift-gate is required it must be specified and additional fees will incur. Shipping charges that appear on this quote are an estimate, AMS.NET will invoice and the customer will pay the actual shipping charge when identified.
- Upon delivery of equipment, customer agrees to open all shipments and visually inspect equipment for physical damages. All damages must be reported to AMS.NET within 24 hours of delivery.
- 7. Returns will be accepted at AMS.NET discretion and are subject to manufacturer returns policies as well. For returns to be approved all merchandise must be in an unopened box and the customer agrees to pay a restocking fee of 15% of the purchase price. Returns must be made within 15 Days of receipt. All shipments must have a valid RMA number from AMS.NET before returning. For RMA requests please contact our Customer Service Department at (800) 893-3660 Ext. 6111. Email RMA requests should be directed to <a href="mailto:service@ams.net">service@ams.net</a> A copy of AMS.NET's full RMA policy is available for review online at <a href="https://www.ams.net/services/procurement-and-financing/">www.ams.net/services/procurement-and-financing/</a>

- 8. The laws of the State of California will apply to this sale.
- 9. The term "installation date" means the first business day on which installation of the system is complete. Minor omissions or variances in performance of the System that do not materially or adversely affect the operation of the system, shall not be deemed to have postponed the Installation Date. Seller shall use its best efforts to make timely delivery and installation. However, all stated delivery and installation dates are approximate and except as expressly provided in this agreement, Seller shall, under no circumstance, be deemed to be in default hereunder or be liable for consequential, incidental or special damages or commercial loss resulting from delays in delivery or installation.
- 10. Warranties. AMS warrants to Customer that it has good title to the equipment being sold to Customer under this Agreement, and the right to sell such equipment to Customer free of liens or encumbrances. AMS further warrants to Customer that the equipment being sold to Customer hereunder shall be free from defects in workmanship for a warranty period of thirty (30) days commencing on the later date the equipment is delivered to Customer or the date upon which AMS completes performance of the services to be performed under this agreement (this warranty being hereinafter referred to as an "Installation Warranty"). Except as expressly set forth in this paragraph, AMS does not make, and hereby disclaims, any and all representations or warranties, express or implied, with respect to the equipment or services being provided under this agreement, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, satisfactory quality, against infringement, or arising from a course of dealing, usage or trade practice. AMS shall reasonably cooperate and assist Customer in enforcing any manufacturer warranties with respect to the equipment being sold to Customer under this Agreement. AMS hereby advises Customer, and Customer acknowledges that in the event Customer desires to procure from AMS any warranty protection beyond the warranty of title and the Installation Warranty provided under this Paragraph, Customer may do so by entering into a separate Service Agreement with AMS.

Manufacturer's warranty that is guaranteed is whatever is published by the manufacturer at the time of purchase.

11. Cisco Cloud services purchased from AMS.NET requires customer to accept Cisco's Universal Cloud agreement located on Cisco Systems' Website. This Universal Cloud Agreement describes the rights and responsibilities related to the Cloud Service(s) you purchase from Cisco or an Approved Source and is between you and Cisco. The Universal Cloud Agreement includes the applicable Offer Description(s) located at <a href="https://www.cisco.com/go/cloudterms">www.cisco.com/go/cloudterms</a> (collectively "Agreement"). By clicking 'accept,' or using the Cloud Service, you agree to the terms of this Agreement. If you do not have authority to enter into this Agreement, or if you do not agree with its terms, do not click 'accept' and do not use the Cloud Service. If you determine that you cannot comply with the terms of this Agreement after you have paid for the Cloud Service, you may terminate your



access to the Cloud Service for a full refund provided you do so within thirty (30) days of your purchase.

AMS.NET Tax ID: 94-3291626

C7 License: 763508

### AMS.NET, Inc.

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### RUCKUS

### RUCKUS® Analytics

Network analytics and assurance for RUCKUS enterprise networks



### **BENEFITS**

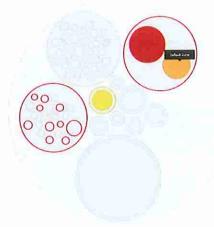
- Provides comprehensive visibility into network operations
- Accelerates network and client troubleshooting
- Identifies, prioritizes and recommends remediation steps for service issues
- Helps IT teams improve the user experience
- Works with your RUCKUS network to automatically validate service levels

IT teams often lack the tools to ensure required network service levels in an environment of ever-increasing user connectivity demands and network complexity. Helpdesk tickets from user connectivity issues pile up while IT struggles to glean insight from network data. When service issues affect user experience, IT often lacks a way to identify root causes and define a course of action to fix the problem.

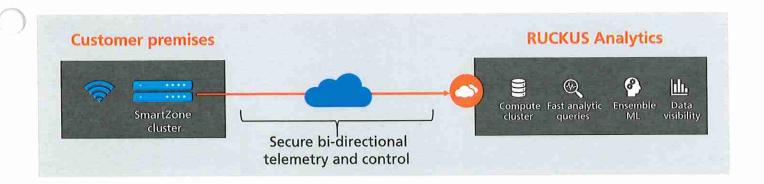
RUCKUS Analytics from CommScope is a cloud service for network analytics and assurance. Powered by machine learning (ML) and artificial intelligence (Al), it helps you get the most from your RUCKUS network. The service gives IT comprehensive visibility into network operations. It accelerates troubleshooting and helps IT teams meet their network service level agreements (SLAs).

The service identifies network assurance incidents, classifies them by severity, traces root causes and makes specific recommendations for remediation. It automatically monitors network health relative to configurable thresholds. Advanced client troubleshooting and incident analytics give IT teams the power to address service issues for individual users and devices. RUCKUS Analytics works with your RUCKUS network to allow it to self-validate—without the need for overlay sensors. You can identify and address many service issues before they even affect users.

The service also delivers robust reporting and informative dashboards. Create custom dashboards and data visualizations with the Data Explorer tool—and flexibly explore your network data warehouse with drag-and-drop ease.



This detail from the main dashboard shows a circle packing chart. It provides a graphical representation of the network hierarchy, with color coding that indicates where network incidents have occurred. You can easily zoom in for a closer view by clicking on an area of the chart.



RUCKUS Analytics aggregates raw data and automatically transforms it into deep insight into network operations. This ML-and Al-powered analytics service frees you from a wide variety of manual tasks associated with network assurance. Comprehensive network intelligence helps you deliver on network SLAs in support of users, devices and applications.

RUCKUS Analytics automatically measures the impact of SmartZone configuration changes on network performance. You can observe the effects of each change on a portion of the network before rolling it out more broadly. This helps to avoid fully rolling out changes that might have an adverse effect on network performance.

It scales to support the largest deployments—expanding capacity transparently to meet your requirements. RUCKUS Analytics supports two control and management architectures: SmartZone\* for on-premises and private cloud/data center deployments, and RUCKUS Cloud for cloud-managed deployments.

RUCKUS Analytics has an industry-unique combination of attributes:

- Automated data baselining and insights driven by ML and Al
- Health and SLA monitoring
- Powerful, holistic troubleshooting
- Automatic classification of incident severity
- Service validation without the need for an on-site data collector or overlay sensors
- Granular access to raw data with deep exploration and custom dashboards
- 12 months of storage with flexible data reporting

### Streaming telemetry with a modern data stack for advanced analytics

RUCKUS Analytics is designed for the unique data profile generated by network devices. On-premises controllers securely connect to the cloud and stream lightweight health KPIs and telemetry. The high-performance data stack ingests and processes the data to serve as the basis for queries, reports and baseline metrics.

### Network health monitoring

The service automatically monitors network health, with an overview tab that provides a high-level summary view. Select other health monitoring tabs to view metrics in specific health categories: connection, performance and infrastructure. Network health monitoring gives you instant visibility into metrics like AP service uptime, time to connect, connection success rate, client throughput and more. You define the service levels you want to measure against. For example, you might want to set the "time to connect" goal at five seconds—RUCKUS Analytics will tell you what percentage of the time the network meets that goal. The service lets you readily demonstrate to others in your organization performance to SLAs.

### Incident analytics powered by machine learning and artificial intelligence

RUCKUS Analytics enables machine-assisted proactive networking for your RUCKUS deployment. It automatically establishes a normal range of behavior for each network element, without requiring any input from IT. Then it uses machine learning to automatically identify service incidents related to connectivity, performance and infrastructure that affect user experience. It uses artificial intelligence to classify service incidents by severity—so you can address the highest-priority issues first.

<sup>\*</sup> SmartZone 5.1.2 or higher is required.

The system provides details for each incident, including:

- Root cause and recommended action
- Affected areas (client operating system types, access point models, firmware versions, WLANs and more)
- Other impact details, including severity, client impact and duration
- List of impacted clients
- Presentation of the underlying data that drives the incident

RUCKUS Analytics dramatically reduces mean time to resolution for service incidents. It can eliminate some helpdesk tickets by letting you address issues before they affect users. By addressing the root cause for one incident, you can avoid other incidents that might arise from that cause. Service providers can realize instant business value when level 1/2 helpdesk personnel can remediate complex network problems using RUCKUS Analytics.

#### Powerful client troubleshooting

With simple and flexible search and a holistic client troubleshooting page, RUCKUS Analytics gives you a complete picture of client experience for easy connectivity and user experience diagnostics, including:

- Successful, slow and failed connections
- Disconnect events
- · Roaming events and failed roams
- Connection quality (RSSI, MCS, client throughput)
- Network incidents affecting users, with links to see incident details

Client troubleshooting is a powerful tool that helps you understand and address issues affecting specific clients on the network.

#### Automatic service validation

RUCKUS Analytics works with your RUCKUS network to automatically validate service levels without the need for overlay sensors. Access points act as virtual clients to identify possible service disruptions, often before they affect users. The system can perform a variety of tests, including:

- WLAN, LAN and WAN connectivity
- EAP, RADIUS, DHCP and DNS
- Ping, traceroute and speed test (upload/download)

#### Melissa—your own Al-powered virtual network assistant

RUCKUS Analytics includes a powerful Al-powered virtual network assistant called Melissa. Combining an intuitive interface with advanced natural language processing, Melissa determines the administrator's intent in posing a wide variety of inquiries and delivers highly insightful responses. IT teams save valuable time with ready access to information that helps them manage network operations—without the need for any coding.

#### IT service management integration

RUCKUS Analytics integrates closely with leading IT service management (ITSM) products from ServiceNow and Salesforce to initiate helpdesk tickets automatically and let IT get a head start in resolving them. This ensures that, when a service issue occurs, it is flagged for the helpdesk to address. Without such a system in place many issues that affect user experience go unreported.

#### Prepackaged reports and dashboards

A wide variety of standardized reports provides visibility into network performance, traffic patterns, application usage and more. Summary views provide high-level information, and you can drill down to the level of individual network components and devices. Examples of standardized reports include:

- Network—traffic and client trends, top devices, top SSIDs, traffic distribution and more
- Client—reports by OS and device manufacturer, top clients by usage, client trends, session details and more

- Inventory—AP, switch and controller count, models, firmware, status and more
- Application—top apps and their usage trends, top app groups and usage, top ports and more
- Device-specific reports—complete visibility and usage reports for clients, APs and switches

The service lets you download reports as raw data, a PDF file or a CSV file. Forward the results to stakeholders inside or outside the organization.

#### Data Explorer—custom dashboards, data visualizations and more

The RUCKUS Analytics Data Explorer tool lets you create custom dashboards to dissect and analyze data from your network ecosystem. Drag-and-drop dashboard creation makes it easy to design views tailored to your needs. You can easily position and reposition dashboard tiles, edit tiles at will and toggle between different views.

Analyze and filter data by dozens of dimensions—including time, device type, traffic type, application, AP group, controller, access point, band, SSID and more. Use multiple visualization methods to view your data, including pivot tables, line charts, bar charts, sunbursts, Sankey diagrams, stacked charts and heat maps. Data Explorer puts your full network data warehouse at your fingertips so you can answer any number of network questions.

#### Cloud deployment for scalability and expandability

As a hosted service, RUCKUS Analytics relieves you of the burden of managing an in-house network analytics platform. Because the system stores data in the cloud, capacity is virtually limitless and expands instantly as your network environment generates more data. You don't have to worry about running out of capacity, forecasting disk utilization or figuring out when to add resources. RUCKUS Analytics does that for you transparently using containers and microservice orchestration. The software does not require an on-site data collector. Cloud deployment enables the machine learning algorithms embedded in RUCKUS Analytics to provide maximum insight.

Customers can designate a third party—such as a RUCKUS networking solution provider—to administer their account. Managed service providers (MSPs) can manage multiple end-customer RUCKUS Analytics accounts from within their own account.



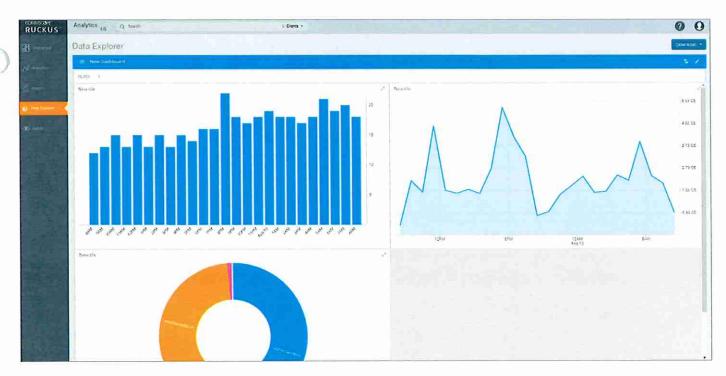
**Health Monitoring** | RUCKUS Analytics automatically monitors network health across a variety of metrics in three areas: connection, performance and infrastructure.



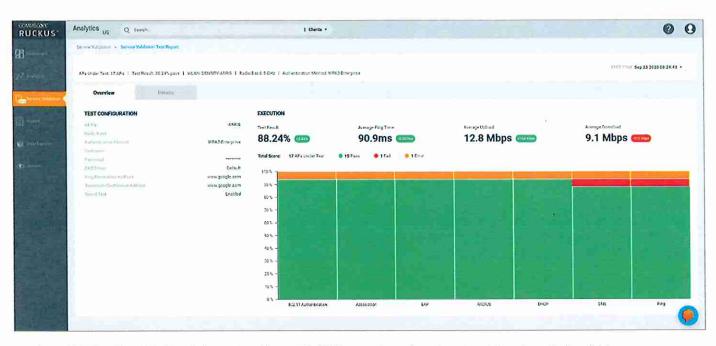
**Incident Analytics** | RUCKUS Analytics provides a root cause analysis of each service incident with specific recommendations for how to resolve the issue.



Advanced Client Troubleshooting | Lets you investigate and resolve issues that have impacted a specific client on the network.



Data Explorer | The Data Explorer tool in RUCKUS Analytics lets you create custom dashboards with drag-and-drop ease.



**Service Validation** | RUCKUS Analytics works with your RUCKUS network to allow the network to automatically validate network service levels.



**Reporting** | RUCKUS Analytics includes a wide variety of pre-packaged reports. This report shows metrics related to the RUCKUS switches in the network.

#### **Specifications**

Security, privacy and data protection	<ul> <li>All traffic to and from the cloud is encrypted</li> <li>Only AP, switch, and client management traffic are sent to the cloud</li> <li>Client data traffic stays local (broken out to local LAN and sent through existing firewall)</li> <li>All data stored in RUCKUS Cloud is encrypted at rest</li> <li>RUCKUS offers EU-located data centers for European customers</li> <li>Latest security patches are automatically updated</li> <li>Role-based access control is provided for administrative privileges</li> </ul>	Admin can grant and revoke access to partners and RUCKUS support View RUCKUS Cloud privacy policy
Cloud data center	Hosted in USA, Europe and Asia on world-class IAAS provider with:     ISO 27001 information security certification     SSAE-16, SOC 1, SOC 2 and SOC 3 certifications     Stringent physical, data access and data disposal security measures     Per-tenant migration capabilities     Green carbon-neutral facilities     Dedicated inter-DC fiber connectivity	Ability to choose the hosting region for your service (USA, EU or Asia)
SLA	99.9 percent network availability (does not include planned maintenance, including periodic software upgrades and other pre-announced activities)	
Support	24x7 chat/web/phone support included for the term of the subscription	
Part numbers	<ul> <li>CLD-ANAP-1001         <ul> <li>RUCKUS Analytics one-year subscription for one Cloud- or SmartZone-managed AP or ICX switch</li> </ul> </li> <li>CLD-ANAP-3001         <ul> <li>RUCKUS Analytics three-year subscription for one Cloud- or SmartZone-managed AP or ICX switch</li> </ul> </li> <li>CLD-ANAP-5001</li> </ul>	
	<ul> <li>RUCKUS Analytics five-year subscription for one Cloud- or SmartZone-managed AP or ICX switch</li> <li>CLR-ANAP-1001         <ul> <li>RUCKUS Analytics one-year renewal for one Cloud- or SmartZone-managed AP or ICX switch</li> </ul> </li> <li>CLR-ANAP-3001         <ul> <li>RUCKUS Analytics three-year renewal for one Cloud- or SmartZone-managed AP or ICX switch</li> </ul> </li> <li>CLR-ANAP-5001         <ul> <li>RUCKUS Analytics five-year renewal for one Cloud- or SmartZone-managed AP or ICX switch</li> </ul> </li> </ul>	

### **COMMSCOPE®**

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### RUCKUS® Cloud

# RUCKUS

Al-enabled converged network management-as-a-service



### YOUR RUCKUS CLOUD SUBSCRIPTION INCLUDES:

- · AP and switch management
- · Instant availability of new features
- Free native mobile app for anywhere management
- · 24x7 phone/chat/web technical support
- · Choice of 1-, 3- or 5-year subscriptions
- Management portal for MSPs and VARs
- · RESTful Open APIs



RUCKUS Cloud, our Al-enabled converged network managementas-a-service platform, simplifies deployment, monitoring and management of your single-site or geographically distributed multi-site wired and wireless network. Manage all of your wired and wireless networks from anywhere using the intuitive web interface or our native mobile app. Administrators get a unified ("single pane of glass") view of all venues, as well as connected access points (APs), switches and clients.

#### SIMPLE AND INTUITIVE CONVERGED MANAGEMENT

Radically simplify wired and wireless network administrative tasks—from day-to-day management to setting up new venues and creating guest networks using built-in multi-site management tools. Expedite provisioning, management, and control via intuitive intent-based workflows. Leverage configure once, deploy everywhere model to provision and manage your multi-site networks with speed and accuracy. RESTful Open APIs lets you automate using programming language of your choice. Native mobile app lets you provision, manage, and monitor the whole network from anywhere, anytime. Improve responsiveness to organizational needs while reducing IT overhead.

## AI AND MACHINE LEARNING-DRIVEN NETWORK ANALYTICS AND ASSURANCE

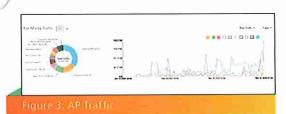
Using advanced artificial intelligence (AI) and patented machine learning techniques, RUCKUS Cloud gives you the troubleshooting tools to react quickly to service-affecting issues and to stop network anomalies from rising to the service-affecting level. It even classifies incidences by severity, so you know where to focus first. Moreover, it not only identifies and surfaces incidents that are already service affecting but also provides root cause analyses and specific recommendations for resolving such incidents. This helps you in troubleshooting with speed and precision. Simply put, RUCKUS Cloud enables you to meet SLAs that your business demands.

#### **EXCEPTIONAL END USER EXPERIENCES**

RUCKUS APs are known for exceptional Wi-Fi performance even under the most challenging network conditions. Low-latency, non-blocking architecture of multigigabit RUCKUS ICX switches ensures excellent throughput for the most demanding applications. RUCKUS Cloud lets you address the end user experience challenge from both angles: Industry-leading Wi-Fi APs and multigigabit ICX switches give you a rock-solid foundation. Machine learning and AI take care of the rest.









#### **RUCKUS CLOUD HIGHLIGHTS**

#### HIGH PERFORMANCE WI-FI 6 (802.11ax) AND 802.11ac APs

- Patented BeamFlex® and ChannelFly® technologies in RUCKUS APs deliver better performance in challenging RF environments (high client density, high interference, and/or high loss)
- Superior capacity and coverage than competitive solutions (30% to 50% more clients supported per AP) lower total cost of ownership
- · Automatic client load balancing and band balancing ensure QoS for all clients
- SmartMesh, enabled with a click on the RUCKUS Cloud UI, reduces cabling and installation costs

#### SIMPLE, SECURE AND SCALABLE FIXED FORM-FACTOR RUCKUS SWITCHES

- · Zero-touch deployment and configuration
- · Upgradable, flexible architecture
- Industry-leading price/performance
- · Unique stacking capabilities simplify management
- · Switch stacking creation and management
- Multigigabit Ethernet enables next generation wireless deployment

#### INTUITIVE UI AND INTENT-BASED WORKFLOWS

- Single-pane-of-glass web UI provides centralized visibility and control of venues, APs, switches, client details, and applications
- · View historical client data and trends
- · See the health of your network at a glance
- Intuitive UI makes management easy for administrators, reducing dependence on specialized IT resources
- · Wizard-guided, intent-based workflows save time on everyday tasks

#### REDUCED UNPLANNED DOWNTIME

- Al-enabled detection and prioritization of complex network issues without IT intervention
- ML-powered network intelligence enables troubleshooting with speed and precision
- End-to-end client to AP to switch visibility and trace routing enable IT to quickly detect and react to potential user experience degradation
- · Elasticsearch for comprehensive lookup
- Instant notification of network status via SMS, mobile app push notification, or email

#### EASY, FLEXIBLE GUEST AND EMPLOYEE NETWORK SETUP

- · Self-help or sponsored guest WLANs
- · Customized, branded captive portal for guests in six easy steps
- Guest captive portal can be customized in 20+ languages
- · Integration with multiple RUCKUS validated third-party captive portal solutions
- Multiple options to secure guest networks: Social login, SMS, email, clickthrough, passcode
- Secure employee access using PSK, DPSK, Cloudpath or 802.1X with AAA

#### NATIVE MOBILE APP

- Provision, monitor and manage your networks using the RUCKUS Cloud by CommScope mobile app
- · Get push notifications to alert you of network issues or changes
- Scan AP or switch barcodes with your smartphone camera to register devices
- Scan business cards to generate guest passes
- · Set up and configure new employee and guest networks
- Customize captive portal messages and images on the go

#### **BUILT-IN REPORTING AND ANALYTICS**

- Extensive report options, including traffic reports (by venue, AP, switch, SSID, radio), application visibility and unique clients
- · Up to 12 months of stored data to support long-term trending analysis
- · Reports available at granular intervals
- · Customizable data dashboards using Data Explorer

#### COMPLETE INVESTMENT PROTECTION

- Operational LAN, APs and switches even when RUCKUS Cloud subscription is no longer active
- Complete flexibility to migrate from one management architecture to another without losing use of your RUCKUS APs or switches

High-performance APs	<ul> <li>Management of a wide range of indoor, outdoor, and specialty RUCKUS APs</li> <li>Automatic load balancing (between APs and radios)</li> </ul>	Airtime fairness     Easy-to-configure, secure and reliable mesh networking			
Network devices supported	See <a href="https://www.commscope.com/cloud-supported-net-">https://www.commscope.com/cloud-supported-net-</a>	work-devices for a list of supported network devices.			
Switch models supported	<ul> <li>RUCKUS ICX 7150 Series</li> <li>RUCKUS ICX 7550 Series</li> <li>RUCKUS ICX 7650 Series</li> </ul>	RUCKUS ICX 7850 Series     Requires ICX FastIron software 8.0.90d or later			
Network analytics and assurance	RUCKUS Analytics (subscription sold separately)				
Native mobile app	Scan to register multiple APs and switches to the RUCKUS Cloud by CommScope	<ul> <li>Customize captive portal elements (images and message)</li> </ul>			
	Push notifications for alarms	<ul> <li>Schedule SSIDs by day of the week and time of day</li> </ul>			
	Monitor status of AP, WLAN, switches and clients	<ul> <li>Native support for iOS and Android</li> </ul>			
	Create and configure new SSIDs (enterprise or guest)	<ul> <li>Configure switch port settings</li> </ul>			
Zero-touch provisioning	<ul> <li>Zero-touch switch deployment and configuration</li> <li>Zero-touch AP provisioning and bulk scanning</li> </ul>	Auto update of AP and switch firmware once connected to RUCKUS Cloud			
Employee Wi-Fi	Multiple employee authentication options available:     Traditional PSK (WPA/WPA2/WPA3)	Fast BSS Transition (802.11r) to reduce handoff times between APs while providing security and QoS			
	- 802.1X with AAA and dynamic VLAN support  · Ability to set bandwidth rate limit per client and per AP	802.11k support to facilitate efficient roaming			
Guest Wi-Fi	Flexible login options:	Ability to force DHCP IP addressing			
	- Open, SMS, email, click-through, passcode	· Guest manager (front desk) admin portal			
	– Social networking login (Google, LinkedIn, Facebook, Twitter)	<ul> <li>MAC caching to allow repeat customers quick access to guest Wi-Fi</li> </ul>			
	– PSK, captive portal, sponsored guest	<ul> <li>Easily customizable built-in captive portal</li> </ul>			
	Bulk creation of guest credentials     Control access to network resources:	<ul> <li>Integration with third-party guest Wi-Fi marketing platforms including Linkyfi, Purple Wi-Fi, Cloud4Wi, GoZone WiFi and more</li> </ul>			
	- Time-based scheduling of SSIDs	Support for any WISPr provider with custom settings			
	Free Wi-Fi with lock-out period and simple unblock options	for guest portal configuration			
	Granular administrative controls:	<ul> <li>Captive portal languages: Chinese (Traditional), Danish, Dutch, English, Finnish, French, German,</li> </ul>			
	- Per WLAN aggregate bandwidth limit	Greek, Italian, Japanese, Norwegian, Polish,			
	- Per AP and per client bandwidth limit	Portuguese, Romanian, Swedish, Spanish, and Turkish			
Dynamic Pre-shared key	Enhanced DPSK features supported natively in the	Supports these types of DPSK:			
(DPSK)	Cloud	- Bound DPSK: End device MAC address is required at			
	No additional appliance or license required to deploy DPSK	the time of DPSK creation  - Unbound DPSK: End device MAC address is not			
	Up to 10,000 DPSKs can be automatically generated in bulk or individually added on the clients page	required at the time of DPSK creation.  - Unbound Group DPSK: Can be used with unlimited			
	<ul> <li>Each DPSK can be assigned a Username and VLAN, and DPSKs can be bulk exported via .csv</li> </ul>	MAC addresses and does not require MAC addresses at creation			

Switch configuration	<ul> <li>VLANs , Spanning Tree, Multicast snooping, DHCP Snooping, member ports</li> <li>Port settings, PoE control</li> <li>Inter VLAN routing, Static routes</li> <li>Host name, Jumbo mode, DNS</li> </ul>	<ul> <li>Direct access to configuration via remote CLI, console or SSH</li> <li>Configuration backup and restore</li> </ul>
Switch stacking	· Create and manage stacks	<ul> <li>Automatically detect member switch addition, removal and replacement</li> </ul>
Location services	Integration with RUCKUS SPoT™ location services	<ul> <li>Integrations with location services by RUCKUS ecosystem partners</li> </ul>
Security, privacy and data protection	<ul> <li>All traffic to and from the cloud is encrypted</li> <li>Only management traffic are sent to the cloud</li> <li>Client data traffic stays local (broken out to local LAN and sent through existing firewall)</li> <li>All data stored in RUCKUS Cloud is encrypted at rest</li> <li>RUCKUS offers EU-located datacenters for European customers and APAC-located datacenters for APAC customers</li> <li>Latest security patches are automatically updated.</li> <li>Configurable client inactivity timeout interval</li> <li>Role-based access control is provided for administrative privileges</li> <li>Admin is able to grant and revoke access to partners and RUCKUS support</li> </ul>	<ul> <li>Client isolation is enabled by default for guest SSID</li> <li>SSID scheduling prevents unauthorized use of Wi-Fi network</li> <li>Advertise only certain SSIDs within a venue</li> <li>Auto-discovery of APs and switches</li> <li>L3/L4 access control for traffic policies</li> <li>L2 device policy to control network access</li> <li>View Ruckus Cloud privacy policy</li> <li>Ability to control the number of devices or even specific devices that are able to use use a particular DPSK (Dynamic Pre-shared key)</li> <li>Support for MFA for administrator access</li> </ul>
Cloudpath support (subscription sold separately)	<ul> <li>Add-on service enables self-service onboarding and granular per user, per device-based policy</li> <li>Multi-factor authentication support for admin access via Email, SMS, or Authenticator app</li> </ul>	<ul> <li>Muse® multiple certificate sources, including built-in public key infrastructure (PKI), Microsoft CA and InCommon, provide stronger security than passwords/ PSKs</li> </ul>
Built-in reporting	Switch traffic Switch resource utilization (CPU, Memory) Switch port status: Up/Down; Port speed; PoE usage; Alarms; LLDP Neighbors Switch details: MAC Address; IP Address; Uptime; Firmware Nearly 40 different report options, including: Traffic per AP, per switch, per SSID, per venue, per radio Top N applications Top clients by traffic Session details Unique client reports (tracking 2.4 vs. 5GHz clients over time)	<ul> <li>Up to 12 months data storage for trending with big data analytics:</li> <li>Big data architecture using Hadoop multi-node clusters</li> <li>Indexed structured reporting for fast access</li> </ul>

Other management highlights	<ul> <li>Ability to select RF policies, WLAN types (PSK, 802.1X, Captive Portal, Cloudpath), guest access options, QoS, VLANs and DPSK</li> <li>Flexibility to segment APs within a venue into different AP groups</li> <li>Channel and power control per venue, per AP group and per AP</li> <li>Ability to customize Bonjour services per AP</li> <li>Ability to select an upgrade window</li> <li>RESTful Open APIs for automation</li> <li>Automatic or selectable band balancing (between 2.4 and 5GHz radios on the same AP)</li> </ul>	<ul> <li>Global full and partial search by MAC address, username, hostname, OS type, IP address, AP name; resulting logs pre-filtered by venue, WLAN, APs, clients</li> <li>Google Maps integration</li> <li>Ability to import floor plans to visualize physical location of APs</li> <li>LAN port management for all RUCKUS APs with two or more Ethernet ports</li> <li>DHCP/NAT support on APs</li> <li>Wi-Fi calling configuration support</li> <li>Ability to select a time window for RUCKUS Cloud service upgrade including AP and switch firmwares</li> </ul>
Troubleshooting	<ul> <li>Remotely reboot APs and switches, pull diagnostics information</li> <li>Get notifications of network status via SMS, mobile app push notification, or email</li> <li>Event logs are sorted by venue, SSID, AP, client, event severity, and event type related to AP, client, network, admin</li> <li>Alarms are generated for AP and switch status</li> <li>View historical client data to troubleshoot issues that happened in the past</li> </ul>	<ul> <li>Configure and enable an external syslog server per venue to capture AP and switch events</li> <li>Test connectivity from AP to endpoints or any internet host</li> <li>Elasticsearch for rapid and comprehensive lookup</li> <li>Remote PING and Trace route</li> <li>APs can perform remote packet captures that can be downloaded via the Cloud UI</li> </ul>
Partner admin delegation	<ul> <li>Delegate management of your Wi-Fi network to a RUCKUS authorized VAR (value added reseller) by invitation</li> </ul>	Revoke VAR administrative privileges at any time
Value Added Reseller	Branded RUCKUS Cloud management portal	<ul> <li>Advanced troubleshooting by enabling SSH based CLI access to APs</li> </ul>
Cloud datacenter	Hosted in North America, Europe, and Asia on world-class IAAS provider with:     ISO 27001 information security certification     SSAE-16, SOC 1, SOC 2 and SOC 3 certifications     Stringent physical, data access, data disposal security measures     Per-tenant migration capabilities     Green carbon-neutral facilities     Dedicated inter-DC fiber connectivity	Ability to choose the hosting region for your service. (North America, Europe, or Asia)
SLA	99.9% network availability (does not include planned rother pre-announced activities)	maintenance, including periodic software upgrades and

Technical support	All ICX switches have limited lifetime warranty, except for the extended temperature switch which as a 13-month warranty  Easy button access to support  24x7 chat/online ticketing system/phone support	<ul> <li>U.Sbased RUCKUS NOC</li> <li>AP hardware warranty is covered separately with the AP purchase (refer to AP datasheet); advanced hardware replacement for each AP is sold separately (SKUs starting with 803-)</li> </ul>
Cloud SKUs	<ul> <li>1-year RUCKUS Cloud license for 1 AP</li></ul>	<ul> <li>5-year RUCKUS Cloud license for 1 AP <ul> <li>CLD- RKWF-5001</li> <li>5-year RUCKUS Cloud EDU license for 1 AP</li> <li>CLD- RWED-5001</li> <li>5-year RUCKUS Cloud license for 1 ICX7150-C08P switch</li> <li>CLD-S08M-5001</li> <li>5-year RUCKUS Cloud EDU license for 1 ICX7150-C08P switch</li> <li>CLD-S08E-5001</li> <li>5-year RUCKUS Cloud license for 1 ICX7150 switch</li> <li>CLD- S71M-5001</li> <li>5-year RUCKUS Cloud EDU license for 1 ICX7150 switch</li> <li>CLD- S71E-5001</li> <li>5-year RUCKUS Cloud license for 1 ICX7550 switch</li> <li>CLD-S75M-5001</li> <li>5-year RUCKUS Cloud EDU license for 1 ICX7550 switch</li> <li>EDU SKU CLD-S75E-5001</li> <li>5-year RUCKUS Cloud license for 1 ICX7650 switch</li> <li>CLD- S76M-5001</li> <li>5-year RUCKUS Cloud EDU license for 1 ICX7650 switch</li> <li>CLD- S76E-5001</li> <li>5-year RUCKUS Cloud license for 1 ICX7850 switch</li> <li>CLD- S78M-5001</li> <li>5-year RUCKUS Cloud license for 1 ICX7850 switch</li> <li>CLD- S78M-5001</li> <li>5-year RUCKUS Cloud license for 1 ICX7850 switch</li> <li>CLD- S78M-5001</li> <li>5-year RUCKUS Cloud EDU license for 1 ICX7850 switch</li> <li>CLD- S78E-5001</li> </ul> </li> </ul>

#### A PARTNER AND PLATFORM FOR THE FUTURE

RUCKUS Cloud is our platform for innovation—with planned support of breakthrough wired/wireless technologies, IoT, big data and continued advances in management automation. Our open architecture also allows us to integrate a wide variety of complementary third-party services that enhance the value of your network and provide greater user insight. We're working on every level—on the ground and in the cloud—to support your business initiatives.

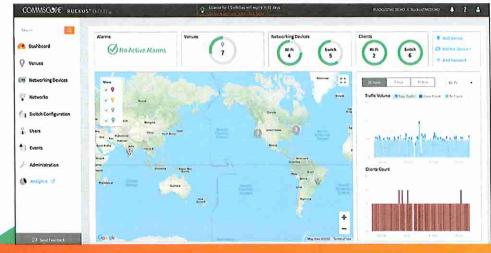




Figure 5, RUCKUS Cloud Web UI and mobile app

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com

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### Ruckus ICX 7150

Enterprise-Class Stackable Access Switch



The Ruckus® ICX® 7150 series of stackable switches delivers the performance, flexibility, and scalability required for enterprise access deployment, raising the bar with non-blocking performance and up to 8x10 GbE ports for uplinks or stacking. It offers seamless interoperability with Ruckus wireless products to deliver unified wired and wireless network access. In addition, Ruckus Multigigabit Ethernet technology offers bandwidth speeds needed to optimize performance of the latest generation high performance wireless access points and edge devices, over standard Ethernet cables.



#### Benefits

#### Stackability Simplifies Management

- Class-leading stacking scalability with up to 12 switches per stack
- Long-distance stacking up to 10 km using standard optics or cables

#### 10 GbE Ports Optimize Network Performance

Up to 8×10 GbE SFP+ ports for stacking or uplinks

#### Dual Power Supplies for High Availability

 Dual load-sharing, hot-swappable power supplies available on the Z-Series switch

#### Multigigabit Support Enables Next Generation Wireless Deployment

 Up to 16x 2.5 and 2x 2.5/5/10 GbE ports optimized for Wi-Fi 5 and 6 deployment

#### Class leading PoE Budget to Power Advanced Edge Devices

- PoE+/PoH/802.3bt budget (up to 1,480 watts)¹
- Support advanced wireless APs and video surveillance equipment

#### Silent Operation for Deployment in the Work Environment

Fanless design or fanless mode enables silent non-disruptive deployment anywhere

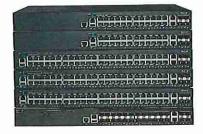
#### Advanced L3 Maximizes Flexibility

· OSPF, VRRP, PIM, PBR L3 features

### Campus Fabric Reduces Cost of Operations, Increases Flexibility

- Ruckus Campus Fabric delivers the benefits of a chassis with the flexibility of stackables
- · Scales to over 1800 ports

The Ruckus ICX 7150 series of switches are available in three formats:



#### Ruckus ICX 7150 Switches

The standard Ruckus ICX 7150 switches are available in 24-, and 48-port 10/100/1000 Mbps models with four 1/10 GbE dual-purpose uplink/stacking ports. These switches are available with or without PoE+ power. Silent operation is available for out-of-closet environments.



#### Ruckus ICX 7150 Z-Series Switch

The Ruckus ICX 7150-48ZP 48-port switch adds higher performance, greater resiliency and increased PoE power. The switch offers Multigigabit technology (IEEE 802.3bz) to match the highest performing 802.11ac Wave 2 wireless access points available, with dual redundant, hot-swappable power supplies and fans, and up to 8x10 GbE uplink/stacking ports.

The switch offers 16 Multigigabit (100Mbps/1Gbps/2.5Gbps) ports, each with Power-over-HDBaseT (PoH) up to 90 watts and 802.3bt ready, plus 32 10/100/1000 Mbps ports with PoE+. With a maximum PoE budget of 1480 watts, this switch delivers the power, and performance, to drive PoE+ power to all 48 ports.



#### Ruckus ICX 7150 Compact Switches

The Ruckus ICX 7150 compact switches come in 8, 10 and 12 ports models and feature a fanless design to operate silently in out-of-closet environments such as offices, classrooms, and retail spaces. They offer PoE on all ports. The ICX 7150-C10ZP delivers up to 90W per port of PoE power and multigigabit Ethernet at 2.5/5/10 Gbps speeds. With 2x1/10 GbE uplink/stacking ports, the ICX 7150-C12P and C10ZP deliver high performance in a small package.

#### Stacking Across the ICX 7150 Series

Ruckus stacking technology makes it possible to stack up to twelve Ruckus ICX 7150 switches into a single logical switch. This allows the Ruckus ICX 7150 to deliver a class-leading 480 Gbps of aggregated stacking bandwidth and offer simple and robust expandability for future growth. Stacking is supported across the ICX 7150 series and all ICX 7150 models including the ICX 7150 compact switches and the ICX 7150-48ZP can be mixed within the same stack. This stacked switch has only a single IP address that simplifies management and offers transparent forwarding across up to 600×1 GbE ports or up to 192×2.5 GbE ports, and up to 96×10 GbE ports. When new switches join the stack, they automatically inherit the stack's existing configuration file, enabling a plug-and-play network expansion.

Because the ICX 7150-48ZP switch has twice as many uplink ports, when it is added to a stack of other ICX 7150 switch models, the effective bandwidth of all the switches is doubled. By designing the stack this way, all four of the 10GbE ports on the ICX 7150 switches can be used for stacking (rather than having to split the four ports between stacking and uplinks), and leveraging four of

the 10GbE ports on the ICX 7150-48ZP for stacking and the other four 10GbE ports can be used for uplinks.

#### **Enterprise-Class Availability**

The Ruckus ICX 7150 Switches help deliver continuous availability to optimize the user experience. Ruckus stacking technology provides high availability by performing real-time state synchronization across the stack and transferring switch management control from the master stack controller to the standby controller if the master stack controller experiences a failure. When hot-inserting or hot-removing a stack member to increase capacity or perform service upgrade, traffic flows will not experience interruption.

In addition to stack-level high availability, Ruckus ICX 7150 Switches also support stack level ISSU (In Service Software Upgrade), a unique capability that allows the user to perform software upgrades to a Ruckus ICX 7150 stack without service interruption. Taking high-availability and reliability even further, the Ruckus ICX 7150 Z-Series switch offers redundant hot swappable load sharing power supplies and up to 2 hot swappable fans.

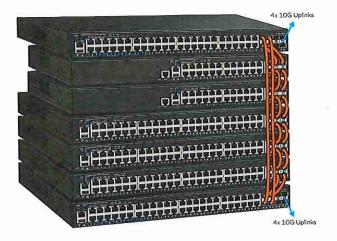


Figure 1: Up to 12 Ruckus ICX 7150 Switches can be stacked together using up to four SFP+ 10 Gbps ports per switch for a fully redundant backplane delivering 480 Gbps of aggregated stacking bandwidth.

#### Silent Operation

The Ruckus ICX 7150 compact switches, along with the Ruckus ICX 7150-24 and the ICX 7150-48 switches, feature a fanless design that enables it to operate silently.

The Ruckus ICX 7150-24P and the ICX 7150-48P offer a "silent mode" configuration option, enabling these switches to operate with the fan disabled while providing a PoE budget of 150 watts. This Ruckus-exclusive feature enables users in hospitality, education, healthcare, and retail industries to deploy these switches outside of the wiring closet without disrupting the work environment.

#### Multigigabit Ethernet Support

The Ruckus ICX® 7150-48ZP Switch raises the bar for entry-level switches even further with 16x IEEE 802.3bz compliant 2.5 GbE ports, up to 8×10 GbE uplink ports, dual redundant load sharing power supplies and class-leading stacking density with up to 12 switches per stack. The ICX 7150-C10ZP delivers multigigabit speeds in a compact form factor with support for 2.5/5 and 10 Gbps. Both switches stack with all other members of the ICX 7150 series allowing organizations to buy what they need now and easily scale as the need for Multigigabit support emerges. It is designed to work seamlessly with Ruckus wireless access points to deliver unified wired and wireless network access.

#### Cost Effective Fiber Switching Solution

The Ruckus ICX 7150-24F fiber switch delivers 24 SFP 1GbE fiber ports for fiber-to-the room deployment scenarios when fiber ports are needed at the edge of the network. It offers 4x10GbE SFP+ for uplink or stacking with the rest of the ICX 7150 series.

With the ICX 7150-24F, Ruckus offers a complete set of fiber switching and routing solutions for every budget from high-end core and aggregation to entry-level access switching.

#### Power Next-Generation Edge Devices

All ICX 7150 series members offer PoE options. The compact 12 port switch delivers PoE+ on all ports with a 124W PoE budget. The 24- and 48-port ICX 7150 switches offer up to 740W of PoE+ power and the ICX 7150 Z-Series offers an industry leading 1480W PoE budget when equipped with 2 power supplies. In addition to supporting PoE and PoE+, the Ruckus ICX 7150 Z-Series also offers Power over HDBaseT (PoH) and is 802.3bt ready.1 This new, high power standard delivers up to 90 watts per port through a standard Ethernet cable, simplifying the wiring of next-generation Ethernet-connected devices such as highperformance wireless APs, large HD displays, video surveillance equipment, and VDI thin terminals, enabling data and power to be carried by a single Ethernet wire. The PoE, PoE+ and PoH capabilities reduce the number of required power receptacles and power adapters while increasing reliability and wiring flexibility.

With a 1,480-watt power budget per switch (with two power supplies), the Ruckus ICX 7150 48ZP model can supply Class 4 PoE+ power (30 watts) to every port and PoH 802.3bt ready power (90 watts) on 16 dedicated Multigigabit ports.

<sup>&</sup>lt;sup>1</sup>Up to 90W per port, IEEE 802.3bt support pending software update. Compatible with uPoE.

#### Ruckus ICX 7150 Product Series

#### Ruckus ICX 7150

These Ruckus ICX 7150 models offer a single integrated power supply, one RJ-45 Ethernet port for out-of-band network management, one USB Type-C port for console management, one RJ-45 port for serial console management, and one USB port for external file storage.

	Ruckus ICX 7150-24 Switch	<ul> <li>24× 10/100/1000 Mbps RJ-45 ports</li> <li>2× 10/100/1000 Mbps uplink RJ-45 ports</li> <li>4× 1/10 GbE uplink/stacking SFP/SFP+ ports</li> </ul>				
- PERITHERA	Ruckus ICX 7150-24P Switch	<ul> <li>24× 10/100/1000 Mbps RJ-45 PoE+ ports</li> <li>370 W PoE budget</li> <li>2× 10/100/1000 Mbps uplink RJ-45 ports</li> <li>4× 1/10 GbE uplink/stacking SFP/SFP+ ports</li> </ul>				
BHHHHHHHHHHHHHH	Ruckus ICX 7150-48 Switch	<ul> <li>48× 10/100/1000 Mbps RJ-45 ports</li> <li>2× 10/100/1000 Mbps uplink RJ-45 ports</li> <li>4× 1/10 GbE uplink/stacking SFP/SFP+ ports</li> </ul>				
	Ruckus ICX 7150-48P Switch	<ul> <li>48× 10/100/1000 Mbps RJ-45 PoE+ ports</li> <li>370 W PoE budget</li> <li>2× 10/100/1000 Mbps uplink RJ-45 ports</li> <li>4× 1/10 GbE uplink/stacking SFP/SFP+ ports</li> </ul>				
	Ruckus ICX 7150-48PF Switch	<ul> <li>48×10/100/1000 Mbps RJ-45 PoE+ ports</li> <li>740 W PoE budget</li> <li>2×10/100/1000 Mbps uplink RJ-45 ports</li> <li>4×1/10 GbE uplink/stacking SFP/SFP+ ports</li> </ul>				
	Ruckus ICX 7150-24F Switch	<ul> <li>24x 100/1000 Mbps SFP ports</li> <li>2x10/100/1000 Mbps uplink RJ-45 ports</li> <li>4x1/10 GbE uplink/stacking SFP/SFP+ ports</li> </ul>				

#### Durkus ICX 7150 7-Series

The Ruckus ICX 7150 Z-Series Switch offers redundant hot swappable load sharing power supplies, up to 2 hot swappable fans, one RJ-45 Ethernet port for out-of-band network management, one USB Type-C port for console management, one RJ-45 port for serial console management, and one USB port for external file storage.



Ruckus ICX 7150-48ZP

- 16x 100/1000 Mbps/2.5 Gbps RJ-45 PoH, 802.3bt ready ports¹
- · 32x 10/100/1000 Mbps RJ-45 PoE+ ports
- · 1,480 W PoE budget (with two power supplies)
- 8x 1/10 GbE uplink/stacking SFP/SFP+ ports

<sup>&</sup>lt;sup>1</sup>Up to 90W per port, IEEE 802.3bt support pending software update. Compatible with uPoE.

#### Ruckus ICX 7150 Product Series

The Ruckus ICX 7150 compact switches offer a single integrated power supply, one RJ-45 Ethernet port for out-of-band network management<sup>2</sup>, one USB

Ruckus ICX 7150-C10ZP Compact Switch	<ul> <li>10x RJ-45 multigigabit ports, including 8x 2.5 GbE ports and 2x 2.5/5/10 GbE ports</li> <li>2x 1/10 GbE uplink/stacking SFP/SFP+ ports</li> <li>240W PoE budget. Delivers up to 90W per port on 4 PoH 802.3bt ready ports. Fanless</li> </ul>
Ruckus ICX 7150-C12P Compact Switch	<ul> <li>12× 10/100/1000 Mbps POE+ RJ-45 ports</li> <li>124 W PoE budget. Fanless</li> <li>2× 10/100/1000 Mbps uplink RJ-45 ports</li> <li>2× 1/10 GbE uplink/stacking SFP/SFP+ ports</li> </ul>
Ruckus ICX 7150-C08P Compact Switch	<ul> <li>8x 10/100/1000 Mbps POE+ RJ-45 ports</li> <li>2x 1GbE SFP uplink ports</li> <li>62W PoE power budget. Fanless</li> </ul>

The Ruckus ICX 7150 extended temperature range compact switch offers a single integrated power supply, and one USB Type-C port for console management.



Ruckus ICX 7150-C08PT Compact Switch

- · 8x 10/100/1000 Mbps POE+ RJ-45 ports
- · 2x 1GbE SFP uplink ports
- · 62W PoE power budget. Fanless
- Extended temperature range from -40°C to 65°C
- · IP30 Rated

<sup>&</sup>lt;sup>2</sup> Not supported on ICX 7150 8 port models

### Enterprise-Class Features Across Ruckus ICX Switches

The Ruckus ICX switch family delivers the enterprise class features for flexibility, scalability and simplified management.

- Ruckus Campus Fabric\* technology delivers unmatched flexibility, scalability and simplified management for campus network
  deployments. Incorporating all of the ICX 7000 switch families with up to 1800 ports in a single logical domain, Campus Fabric
  allows customers the benefits of a traditional chassis, with the flexibility of stackable switches at a dramatically reduced Total Cost
  of Ownership (TCO).
- Advanced stacking\* goes beyond traditional stacking with capabilities that take flexibility, ease of management and cost
  effectiveness to then next level, including:
  - Stacking on standard Ethernet ports
  - Long-distance stacking
  - No hardware module required for stacking
  - In Service Software Upgrade (ISSU) to minimize downtime
  - Superior scalability with the industry-leading number of switches per stack
  - Stacking at the access, aggregation and core layers
- · Enterprise-Class Availability to improve resiliency and minimize downtime, including:
  - Hitless stack failover
  - Hot-insertion/removal of stack members
  - Redundant power supplies
  - In Service Software Upgrades for switch stacks
- Ruckus offers a broad range of unified management solutions for organizations of all types and sizes:
  - Ruckus SmartZone network controllers deliver the scale, flexibility to support the most sophisticated deployment scenarios.
  - Ruckus Cloud eliminates on-premises controllers and management software, moving network management to the cloud.
  - Ruckus Unleashed is a simple-to-setup, easy-to-run management solution in a package designed for small businesses.
- On-boarding and security policies across ICX switches and wireless networks
- OpenFlow 1.3 protocol\* support in hybrid mode allows user to deploy traditional Layer 2/3 forwarding with OpenFlow on the same port for Software Defined Network (SDN) enabled programmatic control of the network
- · Open Standards based management, monitoring and authentication
  - sFlow-based network monitoring to help analyze traffic statistics and trends on every link and overcome unexpected network congestion
  - Open-standards management includes Command Line Interface (CLI), Secure Shell (SSHv2), Secure Copy (SCP), and SNMPv3
  - Support for Access Controller Access Control System (TACACS/TACACS+) and RADIUS authentication helps ensure secure operator access
  - LLDP and LLDP-MED protocol support for configuring, discovering, and managing network infrastructure such as QoS, security policies, VLAN assignments, PoE power levels, and service priorities

<sup>\*</sup> The ICX 7150-C08P does not support stacking, campus fabric and OpenFlow.

### Ruckus ICX 7150 Feature/Model Comparison

						0.45 Ports	24 SEP Forts				Z-Series
	Ruckus ICX 7150-C08P	Ruckus ICX 7150-C08PT	Ruckus ICX 7150-C12P	Ruckus ICX 7150-C10ZP	Ruckus ICX 7150-24	Ruckus ICX 7150-48	Ruckus ICX 7150-24F	Ruckus ICX 7150-24P	Ruckus ICX 7150-48P	Ruckus ICX 7150-48PF	Ruckus ICX 7150-48ZP
Feature	1	3-10-1	1,000		1 3 3 5						
Switching capacity (data rate, full duplex)	20 Gbps	20 Gbps	68 Gbps	120 Gbps	132 Gbps	180 Gbps	132 Gbps	132 Gbps	180 Gbps	180 Gbps	304 Gbps
Forwarding capacity (data rate, full duplex)	14.88 Mpps	14.88 Mpps	51 Mpps	89 Mpps	98 Mpps	134 Mpps	98 Mpps	98 Mpps	134 Mpps	134 Mpps	226 Mpps
10/100/1000 Mbps RJ45 downlinks	8	8	12		24	48		24	48	48	32
100/1000 Mbps SFP downlinks							24				
100/1000 Mbps/2.5 Gbps RJ45 downlinks (full duplex only)				- 8							16
100/1000 Mbps/2.5/5/10 Gbps RJ45 downlinks (full duplex only)				2							
10/100/1000 Mbps RJ45 uplinks (full duplex only, no PoE)			2		2	2	2	2	2	2	
1/10 Gbps SFP/SFP+ uplinks	2 SFPs at 1 Gbps only	2 SFPs at 1 Gbps only	2	2	4	4	4	4	4	4	8
PoE/PoE+ ports	8	8	12	6				24	48	48	32
PoH / PoE / PoE+ 802.3bt ready ports <sup>1</sup>				4							16
Dual hot-swap power supplies				Ŧ							Yes
Maximum PoE Class 3 ports (15.4 W per port)	4	4	8	10				24	24	48	48
Maximum PoE+ Class 4 ports (30 W per port)	2	2	4	8				12	12	24	48 (2 PSU)
Energy Efficient Ethernet (802.3az)				Yes³	Yes	Yes		Yes	Yes	Yes	Yes³
Base IPv4/v6 Layer 3 routing (static routing, RIP)	No L3	No L3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Advanced IPv4/v6 Layer 3 routing (OSPF, VRRP, PIM, PBR features)	No L3	No L3	With license	With license	With license	With license	With license	With license	With license	With license	With license
Aggregated stacking bandwidth (data rate, full duplex)	No Stacking	No Stacking	240 Gbps	240 Gbps	480 Gbps	480 Gbps	480 Gbps	480 Gbps	480 Gbps	480 Gbps	480 Gbp
Stacking density (maximum switches in a stack)	No Stacking	No Stacking	12	12	12	12	12	12	12	12	12
Stacking ports (maximum ports² usable for stacking)	No Stacking	No Stacking	Up to 2×	10 GbE SFP+			Up	to 4×10 GbE	SFP+		
Maximum stacking distance (distance between stacked switches)	No Stacking	No Stacking	10 km	10 km	10 km	10 km	10 km	10 km	10 km	10 km	10 km
Campus Fabric	No Fabric	No Fabric				Fab	ric Port Exten	der (PE)			

<sup>&</sup>lt;sup>1</sup>Up to 90W per port, IEEE 802.3bt support pending software update. Compatible with uPoE.

<sup>&</sup>lt;sup>2</sup> 10 Gbps SFP+ ports are required for stacking.

<sup>&</sup>lt;sup>3</sup> Supported in a future software release.

### Ruckus ICX 7150 Feature/Model Comparison

	6 (0) (2 R Compact	J-45 Poins Switches		.24 or 48 R	J 45 Ports	24 SEP Ports	24.074	18 R 145 PoE	Purs,	Z Segus
			Ruckus ICX 7150-C10ZP		Ruckus ICX 7150-48	Ruckus ICX 7150-24F	Ruckus ICX 7150-24P	Ruckus ICX 7150-48P	Ruckus ICX 7150-48PF	Ruckus ICX 7150-48ZP

Feature						POWER		1				
Power inlet (AC)	C14	C16					C14					
Input voltage/frequency		AC: 100 to 240 VAC @ 50 to 60 Hz										
Power supply rated maximum (AC)	150W 100 V	150W	100 W	150 W	300W	36 W	65 W	100W	525 W	525 W	880 W	2x 920 W
PoE power budget (AC)	62W	62W	124 W	240W				370 W	370 W	740 W	1480 W (2 PSU)	
Switch power consumption* (25°C) Idle (no PoE load) 10% traffic <sup>5</sup> (full PoE load) 100% traffic <sup>5</sup> (full PoE load)	13W 79 W 79 W	13W 79 W 79 W	20 W 157 W 157 W	27 W 242 W 245 W	14 W 24 W 24 W	24 W 38 W 39 W	17 W 40 W 46 W	32 W 455 W 472 W	47 W 476 W 491 W	50 W 869 W 893 W	89 W 917 W 932 W	
Airflow	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Side-to- back	Side-to- back	Side-to- back	Side-to- back	Front-to- back	
Switch heat dissipation (25°C) <sup>4,6</sup> Idle (no PoE load) 10% traffic <sup>5</sup> (full PoE load) 100% traffic <sup>5</sup> (full PoE load)	45 BTU/hr 50 BTU/hr 51 BTU/hr	45 BTU/hr 50 BTU/hr 51 BTU/hr	69 BTU/hr 78 BTU/hr 79 BTU/hr	93 BTU/hr 128 BTU/hr 129 BTU/hr	47 BTU/hr 81 BTU/hr 82 BTU/nr	83 BTU/hr 131 BTU/hr 132 BTU/hr	58 BTU/hr 135 BTU/hr 158 BTU/hr	108 BTU/hr 137 BTU/hr 188 BTU/hr	160 BTU/hr 196 BTU/hr 252 BTU/hr	170 BTU/hr 299 BTU/hr 381 BTU/hr	304 BTU/hr 433 BTU/hr 523 BTU/hr	

Feature	ENVIRONMENT											
Net Weight (Kg)	1.93	2.36	2.58	3.57	3.8	4.82	3.6	4.93	6.17	6.28	6.61	
Dimensions (mm)	270 (W) 214 (D) 44 (H)	270 (W) 240 (D) 44 (H)	269 (W) 213 (D) 43.4 (H)	304 (W) 305 (D) 44 (H)	440 (W) 280 (D) 43.65 (H)	440 (W) 370 (D) 43.65 (H)	440 (W) 370 (D) 43.65 (H)	440 (W) 280 (D) 43.65 (H)	440 (W) 370 (D) 43.65 (H)	440 (W) 370 (D) 43.65 (H)	440 (w) 332(D) 44(H)	
Acoustics (25°C, min fan speed)	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	33 dBA	41.4 dBA	41.8 dBA	47.7 dBA	52 dBA	
MTBF (25°C)	594,384 hours	1,132,818 hours	562,889 hours	529,625 hours	871,931 hours	714,420 hours	541,966 hours	397,428 hours	335,853 hours	312,241 hours	104,626 hours	

USB Type-C port (for console management)	MANAGEMENT PORTS										
	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RJ45 serial port (for serial console management)	No	No	Yes								
USB Type-A port (for external file storage)	No	No	Yes								
RJ45 Ethernet port (for out of band network management)	No	No	Yes								

<sup>&</sup>lt;sup>4</sup> ICX 7150-48ZP Switch includes one AC power supply and one fan.

<sup>&</sup>lt;sup>5</sup> Traffic load on all ports connected with maximum possible PoE/PoE+ loads (if equipped).

<sup>&</sup>lt;sup>6</sup> PoE power not included in switch heat dissipation figures since the heat is not dissipated at the switch.

### Ruckus ICX 7150 Specifications

Feature	SPECIFICATIONS
Connector options	<ul> <li>10/100/1000 Mbps RJ-45</li> <li>1 Gbps SFP ports</li> <li>1/10 Gbps SFP+ ports*</li> <li>Out-of-band Ethernet management: 10/100/1000 Mbps RJ-45*</li> <li>Console management: RJ45 serial port and USB Type-C port with serial communication device class support*</li> <li>File transfer: USB port, standard-A plug*</li> <li>For the latest information about supported optics, please visit <a href="www.ruckusnetworks.com/optics">www.ruckusnetworks.com/optics</a>.</li> </ul>
DRAM NVRAM (Flash) Packet buffer size	• 1 GB • 2 GB • 8/10/12/24 port: 2 MB, 48 port: 4 MB
Maximum MAC addresses	• 16,384
Maximum VLANs Maximum PVLANs	· 4,095 · 32
Maximum STP (spanning trees instances)	• 254
Maximum VEs	• 382
Maximum ARP entries	• 4,094
Maximum routes (in hardware)	• 1,000 (IPv4), 1,000 (IPv6) • Next hop address: 4,094
Trunking	Maximum ports per trunk: 8     Maximum trunk groups: 128
Maximum jumbo frame size	• 9,216 bytes
QoS priority queues	8 per port
Multicast groups	• 3,072 (Layer 2) • 2,048 (Layer 3)
Quality of Service (QoS)	<ul> <li>ACL Mapping and Marking of ToS/DSCP (CoS)</li> <li>ACL Mapping and Marking of 802.1p</li> <li>ACL Mapping to Priority Queue</li> <li>Classifying and Limiting Flows Based on TCP Flags</li> <li>DiffServ Support</li> <li>Honoring DSCP and 802.1p (CoS)</li> <li>MAC Address Mapping to Priority Queue</li> <li>Priority Queue Management using Weighted Round Robin (WRR), Strict Priority (SP), and a combination of WRR and SF</li> </ul>
Traffic management	<ul> <li>ACL-based inbound rate limiting and traffic policies</li> <li>Broadcast, multicast, and unknown unicast rate limiting</li> <li>Inbound rate limiting per port</li> <li>Outbound rate limiting per port and per queue</li> </ul>
Security	* 802.1X authentication     * MAC Address Locking MAC Port Security     * MAC authentication     * Flexible authentication     * RADIUS/TACACS/TACACS+     * Web authentication     * Secure Copy (SCP)     * DHCP snooping     * Secure Shell (SSHv2)     * Protected Ports     * Neighbor Discovery (ND) Inspection     * Bi-level Access Mode (Standard and EXEC Level)     * EAP pass-through support     * IEEE 802.1X username export in sFlow     * Protection against Denial of Service (DoS) attacks     * Authentication, Authorization, and Accounting (AAA)  * MAC Address Locking MAC Port Security     * Advanced Encryption Standard (AES) with SSHv2     * RADIUS/TACACS/TACACS+     * Secure Copy (SCP)     * Secure Shell (SSHv2)     * Protected Ports     * Local Username/Password     * Change of Authorization (CoA) RFC 5176     * Trusted Platform Module     * RADSEC (RFC 6614)     * Protection against Denial of Service (DoS) attacks     * Authentication, Authorization, and Accounting (AAA)
SDN features	OpenFlow1 v1.0 and v1.3 OpenFlow with hybrid port mode Operates with an OpenDayLight Controller

<sup>\*</sup> Not supported on ICX 7150 8 port models

### Ruckus ICX 7150 Specifications (continued)

High availability	<ul> <li>Layer 3 VRRP/VRRP-E protocol redundancy</li> <li>Real-time state synchronization across the stack</li> <li>Hitless failover and switchover from master to standby stack controller</li> <li>Hot insertion and removal of stacked units</li> <li>Layer 2 VSRP switch redundancy</li> <li>In Service Software Update (ISSU)</li> </ul>	
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Feature	FEAT	URE SETS
Layer 2 feature set	802.1s Multiple Spanning Tree     802.1x Authentication     Auto MDI/MDIX     BPDU Guard, Root Guard     Dual-Mode VLANs     MAC-based VLANs, Dynamic MAC-based VLAN activation     Dynamic VLAN Assignment     Dynamic Voice VLAN Assignment     Fast Port Span     GVRP: GARP VLAN Registration Protocol     IGMP Snooping (v1/v2/v3)     IGMP Proxy for Static Groups     IGMP v2/v3 Fast Leave     Inter-Packet Gap (IPG) adjustment     Link Fault Signaling (LFS)     MAC Address Filtering     MAC Learning Disable	<ul> <li>MLD Snooping (v1/v2)</li> <li>Multi-device Authentication</li> <li>Per-VLAN Spanning Tree (PVST/PVST+/PRST)</li> <li>Mirroring: Port-based, ACL-based, MAC Filter-based, and VLAN-based</li> <li>PIM-SM v2 Snooping</li> <li>Port Loop Detection</li> <li>Private VLAN</li> <li>Remote Fault Notification (RFN)</li> <li>Single-instance Spanning Tree</li> <li>Trunk Groups (static, LACP)</li> <li>Uni-Directional Link Detection (UDLD)</li> <li>Metro-Ring Protocol (MRP) (v1, v2)</li> <li>Virtual Switch Redundancy Protocol (VSRP)</li> <li>Q-in-Q and selective Q-in-Q</li> <li>VLAN Mapping</li> <li>Topology Groups</li> </ul>
Base Layer 3 IP routing feature set*	Port-based Access Control Lists Layer 3/Layer 4 ACLs	<ul> <li>Host routes</li> <li>Virtual Interfaces</li> <li>Routed Interfaces</li> <li>Route-only Support</li> <li>Routing Between Directly Connected Subnets</li> </ul>
Premium Layer 3 IP routing feature set with software license*	IPv4 and IPv6 dynamic routes     OSPF v2, v3     PIM-SM, PIM-SSM, PIM-DM, PIM passive (IPv4, IPv6)     PBR	<ul> <li>Virtual Route Redundancy Protocol VRRP (IPv4)</li> <li>VRRP v3 (IPv6)</li> <li>VRRP-E(IPv4/IPv6)</li> </ul>

Feature	STANDA	RD COMPLIANCE
IEEE standards compliance	802.1AB LLDP/ LLDP-MED     802.1D MAC Bridging     802.1p Mapping to Priority Queue     802.1s Multiple Spanning Tree (MST)     802.1w Rapid Reconfiguration of Spanning Tree (RSTP)     802.1x Port-based Network Access Control (PNAC)     802.3 Carrier Sense Multiple Access/Collision Detection (CSMA/CD)     802.3ab 1000BASE-T     802.3 10Base-T     802.3ad Link Aggregation (Dynamic and Static)     802.1 AX-2008 Link Aggregation	802.3ae 10 Gigabit Ethernet     802.3af Power over Ethernet     802.3at Power over Ethernet Plus     802.3bz Multigigabit Ethernet     802.3u 100Base-TX     802.3x Flow Control     802.3z 1000Base-SX/LX     802.3 MAU MIB (RFC 2239)     802.1Q VLAN Tagging     802.1BR Bridge Port Extension     802.3az Energy Efficient Ethernet
RFC standards compliance	For a complete list of RFCs supported by the ICX 7000 product please visit <a href="https://www.ruckusnetworks.com/support">www.ruckusnetworks.com/support</a> .	t family,

<sup>\*</sup> Not supported on ICX 7150 8 port models

### Ruckus ICX 7150 Specifications (continued)

Feature	NETWORK AND	DEVICE MANAGEMENT
Management	DHCP Auto Configuration Configuration Logging Digital Optical Monitoring Display Log Messages on Multiple Terminals Embedded Web Management (HTTP/HTTPS) Embedded DHCP Server Industry-standard Command Line Interface (CLI) Ruckus SmartZone, Ruckus Cloud, Ruckus Unleashed CLI activation of optional software features USB file management and storage Macro for batch execution Out-of-band Ethernet Management RSPAN TFTP TELNET Client and Server SSH / SSH V2	Bootp SNMPv1/v2c DHCP Server and DHCP Relay SNMPv3 Intro to Framework Architecture for Describing SNMP Framework SNMP Message Processing and Dispatching SNMPv3 Applications SNMPv3 User-based Security Model SNMP View-based Access Control Model SNMP SFlow Network Time Protocol (NTP) Multiple Syslog Servers SCP Virtual Cable Tester (VCT) From management MIB, please see the ICX technical documentation at ruckusnetworks.com/support
Ruckus Campus Fabric technology	The Ruckus ICX 7150 can operate in fabric Port Extender ( Up to 36 PEs per fabric (up to 1800 ports)  PE cascade depth up to 6 units	PE) mode

Feature	ENVIRONMENT
Temperature	Operating Temperatures: 0°C to 45°C (0°C to 40°C for ICX 7150-C08P and ICX7150-C10P and -40°C to 65°C for ICX 7150-C08PT) Storage Temperatures: -40°C to 70°C
Humidity	Operating relative humidity: 5% to 95% at 45°C, non-condensing (10% to 90% at 65°C for the ICX 7150-C08PT Non-operating relative humidity: 0% to 95% at 70°C, non-condensing
Altitude	Operating altitude: 10,000 ft (3,000 m) maximum Storage altitude: 39,000 ft (12,000 m) maximum

Feature	COMPLIANCE/CERTIFICATION	
Electromagnetic emissions	FCC Class A (Part 15); EN 55022/CISPR-22 Class A; VCCI Class A; ICES-003 Electromagnetic Emission; AS/NZS 55022; EN 61000-3-2 Power Line Harmonics; EN 61000-3-3 Voltage Fluctuation and Flicker; EN 61000-6-3 Emission Standard (supersedes: EN 50081-1)	
Safety	CAN/CSA-C22.2 NO. 60950-1-07; UL 60950-1 Second Edition; IEC 60950-1 Second Edition; EN 60950-1:2006 Safety of Information Technology Equipment; EN 60825-1 Safety of Laser Products—Part 1: Equipment Classification, Requirements and User's Guide; EN 60825-2 Safety of Laser Products—Part 2: Safety of Optical Fibre Communication Systems	
Immunity	EN 61000-6-1 Generic Immunity and Susceptibility (supersedes EN 50082-1); EN 55024 Immunity Characteristics (supersedes EN 61000-4-2 ESD); EN 61000-4-3 Radiated, Radio Frequency, Electromagnetic Field; EN 61000-4-4 Electrical Fast Transient; EN 61000-4-5 Surge; EN 61000-4-6 Conducted Disturbances Induced by Radio-Frequency Fields; EN 61000-4-8 Power Frequency Magnetic Field; EN 61000-4-11 Voltage Dips and Sags	
Environmental regulatory compliance	RoHS-compliant (6 of 6); WEEE-compliant	
Vibration	IEC 68-2-36, IEC 68-2-6	
Shock and drop	IEC 68-2-27, IEC 68-2-32	

<sup>\*</sup> Not supported on ICX 7150 8 port models

### Ruckus ICX 7150 Ordering Information

Part Number	Ruckus ICX 7150 Switches with 1 GbE Uplinks	
ICX7150-C08P-2X1G	Ruckus ICX 7150 Compact Switch, 8x 10/100/1000 Mbps PoE+ ports, 2x 1G SFP uplink-ports, 62W PoE budget, L2 (switch image only, not L3 upgradable), stacking not supported.	
ICX7150-C08PT-2X1G	Ruckus ICX 7150 Compact Switch Extended Temp, 8x 10/100/1000 Mbps PoE+ ports, 2x 1G SFP uplink-ports, 62W PoE budget, L2 (switch image only, not L3 upgradable), stacking not supported, 13 month hardware warranty.	
ICX7150-C12P-2X1G	Ruckus ICX 7150 Compact Switch, 12×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 2×1 GbE SFP uplink-ports upgradable to 2×10 GbE SFP+ with license. 124 W PoE budget, basic Layer 3 (static routing and RIP).	
ICX7150-24-4X1G	Ruckus ICX 7150 Switch, 24×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 4×1 GbE SFP uplink-ports upgradable to up to 4×10 GbE SFP+ with license, basic Layer 3 (static routing and RIP).	
ICX7150-24F-4X1G	Ruckus ICX 7150 Switch, 24x 1G SFP ports, 2x 1G RJ45 uplink-ports, 4x 1G SFP uplink-ports upgradable to up to 4x 10G SF with license, basic Layer 3 (static routing and RIP).	
ICX7150-24P-4X1G	Ruckus ICX 7150 Switch 24×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×1 GbE SFP uplink ports upgradab to up to 4×10 GbE SFP+ with license, 370 W PoE budget, basic Layer 3 (static routing and RIP).	
ICX7150-48-4X1G	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 4×1 GbE SFP uplink-ports upgradable to up to 4×10 GbE SFP+ with license, basic Layer 3 (static routing and RIP).	
ICX7150-48P-4X1G	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×1 GbE SFP uplink ports upgradable to up to 4×10 GbE SFP+ with license, 370 W PoE budget, basic Layer 3 (static routing and RIP).	
ICX7150-48PF-4X1G	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×1 GbE SFP uplink ports upgradable to up to 4×10 GbE SFP+ with license, 740 W PoE budget, basic Layer 3 (static routing and RIP).	

Part Number	Ruckus ICX 7150 Switches with 2×10 GbE Uplinks	
ICX7150-C12P-2X10GR	Ruckus ICX 7150 Compact Switch, 12×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45, 2×10 GbE SFP+ stacking/uplink-ports, 124 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR).	
ICX7150-C10ZP-2X10GR	Ruckus ICX 7150 Compact Switch, 2x 100/1000/2.5/5/10G PoH ports, 2x 100/1000/2.5G PoH ports, 6x 100/1000/2.5G PoE+ports, 2x 10G SFP+ stacking/uplink-ports, 240W PoE budget, L3 features (OSPF, VRRP, PIM, PBR).	
ICX7150-24 -2X10G	Ruckus ICX 7150 Switch, 24×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 2×1 GbE SFP and 2×10 GbE SFP+ stacking/uplink-ports upgradable to 4×10 GbE SFP+ with license, basic Layer 3 (static routing and RIP).	
ICX7150-24F-2X10G	Ruckus ICX 7150 Switch, 24x 1G SFP ports, 2x 1G RJ45 uplink-ports, 2x 1G SFP and 2x 10G SFP+ stacking/uplink-ports upgradable to 4x 10G SFP+ with license, basic L3 (static routing and RIP).	
ICX7150-24P-2X10G	Ruckus ICX 7150 Switch, 24×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 2×1 GbE SFP and 2×10 GbE SFP+ stacking/uplink-ports upgradable to 4×10 GbE SFP+ with license, 370 W PoE budget, basic Layer 3 (static routing and RIP).	
ICX7150-48-2X10G	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 2×1 GbE SFP and 2×10 GbE SFP+ stacking/uplink-ports upgradable to 4×10 GbE SFP+ with license, basic Layer 3 (static routing and RIP).	
ICX7150-48P-2X10G	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 2×1 GbE SFP and 2×10 GbE SFP+ stacking/uplink-ports upgradable to 4×10 GbE SFP+ with license, 370 W PoE budget, basic Layer 3 (static routing and RIP).	
ICX7150-48PF-2X10G	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 2×1 GbE SFP and 2×10 GbE SFP+ stacking/uplink-ports upgradable to 4×10 GbE SFP+ with license, 740 W PoE budget, basic Layer 3 (static routing and RIP).	
ICX7150-48ZP-E2X10G	Ruckus ICX 7150 Z-Series Switch, 16×100/1000 Mbps/2.5 Gbps PoH ports, 32x10/100/1000 PoE+ ports, 6x1 GbE SFP uplink ports and 2x10 GbE SFP+ stacking/uplink-ports upgradable to up to 8x10 GbE SFP+ with license, 1x 920 W AC power supply 1 fan, 740 W PoE budget, base L3 (static routing and RIP).	

### Ruckus ICX 7150 Ordering Information (continued)

Part Number	Ruckus ICX 7150 Switches with up 4 or 8×10 GbE Uplinks and Layer 3 Features	
ICX7150-24-4X10GR	Ruckus ICX 7150 Switch, 24×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, Layer 3 features (OSPF, VRRP, PIM, PBR).	
ICX7150-24F-4X10GR	Ruckus ICX 7150 Switch, 24x 1G SFP ports, 2x 1G RI45 uplink-ports and 4x 10G SFP+ stacking/uplink-ports, L3 features (OSPI VRRP, PIM, PBR).	
ICX7150-24P-4X10GR	Ruckus ICX 7150 Switch, 24×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, 370 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR).	
ICX7150-48-4X10GR	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, Layer 3 features (OSPF, VRRP, PIM, PBR).	
ICX7150-48P-4X10GR	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, 370 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR).	
ICX7150-48PF-4X10GR	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, 740 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR).	
ICX7150-48ZP-E8X10GR	Ruckus ICX 7150 Z-Series switch, 16×100/1000 Mbps/2.5 Gbps PoH ports, 32x10/100/1000 PoE+ ports, 8×10 GbE SFP+ stacking/uplink-ports (max 4 for stacking), 1x920 W AC power supply, 1 fan, 740 W PoE budget, L3 features (OSPF, VRRP, PIM, PBR).	

Part Number	Ruckus ICX 7150 Switches with Three-Year Remote Support  File we make that throesported outstanding ordered separately to cover any Revision ICX 7150 model.	
ICX7150-C08P-2X1G-RMT3	Ruckus ICX 7150 Compact Switch, 8x 10/100/1000 PoE+ ports, 2x 1G SFP uplink-ports, 62W PoE budget, L2 (switch image only not L3 upgradable), stacking not supported, three-year remote support.	
ICX7150-C08PT-2X1G-RMT3	Ruckus ICX 7150 Compact Switch Extended Temp, 8x 10/100/1000 Mbps PoE+ ports, 2x 1G SFP uplink-ports, 62W PoE budget, L2 (switch image only, not L3 upgradable), stacking not supported, 13 month hardware warranty, three-year remote support.	
ICX7150-C12P-2X10GR-RMT3	Ruckus ICX 7150 Compact Switch, 12×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 2×10 GbE SFP+ stacking/uplink-ports, 124 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR), three-year remote support.	
ICX7150-C10ZP-2X10GR-RMT3	Ruckus ICX 7150 Compact Switch, 2x 100/1000/2.5/5/10G PoH ports, 2x 100/1000/2.5G PoH ports, 6x 100/1000/2.5G PoE+ports, 2x 10G SFP+ stacking/uplink-ports, 240W PoE budget, L3 features (OSPF, VRRP, PIM, PBR), three-year remote support.	
ICX7150-24-4X10GR-RMT3	Ruckus ICX 7150 Switch, 24×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, Layer 3 features (OSPF, VRRP, PIM, PBR), three-year remote support.	
ICX7150-24F-4X10GR-RMT3	Ruckus ICX 7150 Switch, 24x 1G SFP ports, 2x 1G RJ45 uplink-ports and 4x 10G SFP+ stacking/uplink-ports, L3 features (OSPF, VRRP, PIM, PBR), three-year remote support.	
ICX7150-24P-4X10GR-RMT3	Ruckus ICX 7150 Switch, 24×10/100/1000 Mbps PoE+ ports, 2×1G RU45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, 370 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR), three-year remote support.	
ICX7150-48-4X10GR-RMT3	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, Layer 3 features (OSPF, VRRP, PIM, PBR), three-year remote support.	
ICX7150-48P-4X10GR-RMT3	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, 370 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR), three-year remote support.	
ICX7150-48PF-4X10GR-RMT3	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, 740 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR), three-year remote support.	
ICX7150-48ZP-E8X10GR-RMT3	Ruckus ICX 7150 Z-Series switch, 16×100/1000 Mbps/2.5 Gbps PoH ports, 32x10/100/1000 PoE+ ports, 8×10 GbE SFP+ stacking/uplink-ports (max 4 for stacking), 1x 920 W AC power supply, 1 fan, 740 W PoE budget, L3 features (OSPF, VRRP, PIM, PBR). Three-year remote support	

### Ruckus ICX 7150 Ordering Information (continued)

Part Number	TAA-Compliant Ruckus ICX 7150 Switches  The for the K-Z150 monels supplied SK Is helpy, meet the representation the Trade Agreements Act (TAA)	
ICX7150-C12P-2X10GR-A	Ruckus ICX 7150 Compact Switch, 12×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 2×10 GbE SFP+ stacking/ uplink-ports, 124 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR), TAA-compliant.	
ICX7150-C10ZP-2X10GR-A	Ruckus ICX 7150 Compact Switch, 2x 100/1000/2.5/5/10G PoH ports, 2x 100/1000/2.5G PoH ports, 6x 100/1000/2.5G PoE+ports, 2x 10G SFP+ stacking/uplink-ports, 240W PoE budget, L3 features (OSPF, VRRP, PIM, PBR), TAA compliant.	
ICX7150-24-4X10GR-A	Ruckus ICX 7150 Switch, 24×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, Layer 3 features (OSPF, VRRP, PIM, PBR), TAA-compliant.	
ICX7150-24F-4X10GR-A	Ruckus ICX 7150 Switch, 24x 1G SFP ports, 2x 1G RJ45 uplink-ports and 4x 10G SFP+ stacking/uplink-ports, Layer 3 features (OSPF, VRRP, PIM, PBR), TAA compliant.	
ICX7150-24P-4X10GR-A	Ruckus ICX 7150 Switch, 24×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, 370 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR), TAA-compliant.	
ICX7150-48-4X10GR-A	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, Layer 3 features (OSPF, VRRP, PIM, PBR), TAA-compliant.	
ICX7150-48P-4X10GR-A	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, 370 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR), TAA-compliant.	
ICX7150-48PF-4X10GR-A	Ruckus ICX 7150 Switch, 48×10/100/1000 Mbps PoE+ ports, 2×1 GbE RJ45 uplink-ports, 4×10 GbE SFP+ stacking/uplink-ports, 740 W PoE budget, Layer 3 features (OSPF, VRRP, PIM, PBR), TAA-compliant.	
ICX7150-48ZP-E8X10GR2-A	Ruckus ICX 7150 Z-Series switch, 16×100/1000 Mbps/2.5 Gbps PoH ports, 32x10/100/1000 PoE+ ports, 8×10 GbE SFP+ stacking/uplink-ports (max 4 for stacking), 2x920 W AC power supply, 2 fans, 1480 W PoE budget, L3 features (OSPF, VRRP, PIM, PBR). TAA compliant.	

Part Number	Upgrade Licenses  All Knokes (C× 7150, metal model) status i Che SFF habits parks can be approach to 10 GHE SFRs parks with a foreness.
BR-ICX-7150C-21U210R-P-01	License to upgrade the Ruckus ICX 7150 12 ports compact switches from 2×1 GbE SFP to 2×10 GbE SFP+ stacking/uplink-ports. Also includes Layer 3 features (OSPF, VRRP, PIM, PBR).
BR-ICX-7150-41U210-P-01	License to upgrade any Ruckus ICX 7150 24/48 ports except the Z-Series from 4×1 GbE SFP to 2×1 GbE SFP and 2×10 GbE SFP+ stacking/uplink-ports.
BR-ICX-7150-41U410R-P-01	License to upgrade any Ruckus ICX 7150 24/48 ports except the Z-Series from 4×1 GbE SFP to 4×10 GbE SFP+ stacking/uplink-ports. Also includes Layer 3 features (OSPF, VRRP, PIM, PBR).
BR-ICX-7150-210U410R-P-01	License to upgrade any Ruckus ICX 7150 24/48 ports except the Z-Series from 2×1 GbE SFP and 2×10 GbE SFP+ to 4×10 GbE SFP+ stacking/uplink-ports. Also includes Layer 3 features (OSPF, VRRP, PIM, PBR).
BR-ICX-7150Z210U810R-P-01	License to upgrade ICX 7150 Z-Series model from 6x1 GbE SFP and 2x10 GbE SFP+ to 8x10 GbE SFP+ stacking/uplink-ports (max 4 for stacking). Also includes L3 features (OSPF, VRRP, PIM, PBR).

### Ruckus ICX 7150 Ordering Information (continued)

Part Number	FRUs and Accessories
RPS20-E	Ruckus ICX 7150-48ZP 920 W AC hot-swap PoE power supply, front to back airflow (up to 2 per switch). Only applicable to the Z-Series
ICX-FAN11	Ruckus ICX 7150-48ZP hot-swap fan tray (up to 2 per switch). Only applicable to the Z-Series
ICX6400-C12-MGNT	Magnet Mount Kit for Ruckus ICX 7150/6450/6430 12 Port Compact Switches
CC-RJ45-DB9	Console cable RJ45-RJ45 with RJ-45-DB9 Adapter (for RJ-45 console port on ICX 7150)
CC-USBC-USBA	USB 2.0 Cable, Type-C to Type-A, 1 meter (for USB Type-C console port on ICX 7150)
ICX7000-C12-RMK	ICX7150-C12P & ICX7150-C08P & ICX7150-C08PT Compact Switch Rack Mount Kit
ICX7000-C10ZP-RMK	ICX7150-C10ZP Compact Switch Rack Mount Kit
ICX7000-C12-WMK	ICX7150-C12P & ICX7150-C08P & ICX7150-C08PT & ICX7150-C10ZP Compact Switch Wall Mount & Under Desk Mount Kit
XBR-R000295	Universal Rack Mount Kit, 4 post FRU
ICX7000-RMK	Rack Mount Kit, 2-post FRU for ICX 7000 series 24/48 port models
RMK-LRM-ADP	Rack Mount Kit for LRM adapters. This 1RU shelf can accommodate up to 8 LRM adapters.
ICX-ADP-PLT	ICX Compact Switch Adapter Plate
ICX-DIN-MNT	ICX Compact Switch DIN Rail Mount Kit

	OPTICS
See Optics Datasheet at www.ruckusnetworks.com/optics	Ruckus offers a unique set of high-performance, reliable, and cost-effective optical transceivers to help enterprises and service providers meet the challenges of diverse network topologies. To ensure maximum quality, Ruckus selects and tests the most reliable, highest-performing optical transceivers on the market, and then warrants their availability, capacity, and performance in Ruckus® product." for a the specific list of optics supported by each ICX product see the Optics Datasheet at www.ruckusnetworks.com/optics.

MANAGEMENT SOFTWARE						
Ruckus SmartZone	SmartZone network controllers simplify network setup and management, enhance security, minimize troubleshooting and ease upgrades for networks built on RUCKUS switches and access points. Whether you're building complex multi-geo networks or delivering multi-tier managed networking services, SmartZone network controllers deliver the scale, flexibility and openness to support the most sophisticated deployment scenarios.					
Ruckus Cloud	Ruckus Cloud takes the complexity of deploying and managing a distributed network out. It enables faster response to organizational needs while also reducing IT overhead. Ruckus Cloud eliminates the need to deploy on-premises controllers and management software, moving network management to the cloud. Your multi-site network can be centrally managed through a single pane of glass web-based UI and full-featured mobile app.					
Ruckus Unleashed	Unleashed is a simple-to-setup, easy-to-run management solution in a package designed and priced for small businesses. With built-in controller functionality, there's no need to invest in a separate appliance for Wi-Fi control or in network management software. You can manage your entire network from your phone or web browser including all your APs and switches together.					

#### **Ordering Notes**

All Ruckus ICX 7150 switches come with an accessory kit that includes a rubber foot kit, power cord clip, rack mount kit (for 24/48 ports model), RJ-45 console cable and US AC power cord. Stacking cables, USB console cables, compact switch rack mount kit, and optics need to be ordered separately.

All Ruckus ICX 7150 switch models with 1 GbE SFP uplink ports can be upgraded to 10 GbE SFP+ ports with a license except for the ICX 7150-C08P.

Standard Ruckus ICX 7150 1 RU Switch models can be ordered configured with either 4×1 GbE SFP, 2×1 GbE SFP, and 2×10 GbE SFP+, or 4×10 GbE SFP+ uplinks.

The Ruckus ICX7150-C12P compact switch can be ordered configured with either 2×1 GbE SFP or 2×10 GbE SFP+ uplinks.

The Ruckus ICX7150-48ZP switch can be ordered configured with 2×10 GbE SFP+ uplinks and 6×1 GbE SFP, or 8×10 GbE SFP+ uplinks.

Upgrade licenses are available to upgrade standard Ruckus ICX 7150 1 RU switches to either 2×1 GbE SFP and 2×10 GbE SFP+ or to 4×10 GbE SFP+, the Ruckus ICX 7150 compact switch to 2×10 GbE SFP+, and the Ruckus ICX7150-48ZP switch to 8×10 GbE SFP+.

Ruckus ICX 7150 Switches with 4×10 GbE SFP+ and 8×10 GbE SFP+ (2×10 GbE SFP+ for the compact switch) include a license to enable Layer 3 features (OSPF, VRRP, PIM, PBR).

Special SKUs have been created to enable customers to order specific Ruckus ICX 7150 models with three-year remote support included. Please note that additional years of remote support can always be ordered separately to cover any Ruckus ICX 7150 model. Contact CommScope or channel partner representative for details about CommScope support options and support part numbers.

For your convenience, a fully loaded ICX 7150-48ZP model with dual power supplies and 8×10 GbE ports bundle has been created. It comes with factory installed power supplies, fans and 8×10 GbE port licenses.

#### Warranty

Ruckus ICX 7150 Switches are covered by the Ruckus Assurance Limited Lifetime Warranty except for the ICX 7150-C08PT which is covered by a 13 month hardware warranty. For details, visit <a href="https://www.ruckusnetworks.com/warranty">www.ruckusnetworks.com/warranty</a>.

#### Best-in-Class Support

Ruckus ICX 7150 switches are supported by next-business-day advance replacement where available, as well as software defect repairs and maintenance updates. 90 days remote support is included with the product purchase. Many on-site and remote support options are available and can be purchased bundled with the product or separately.

#### Legal Disclaimer

Product features, functionality and specifications may change or be discontinued without notice. Nothing in this document shall be deemed to create a warranty of any kind, either express or implied, statutory or otherwise, including but not limited to, any implied warranties of merchantability, fitness for a particular purpose, noninfringement of third-party rights or availability with respect to any products and services.

Refer to <u>www.ruckusnetworks.com</u> for the latest version of this document.

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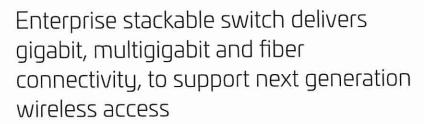
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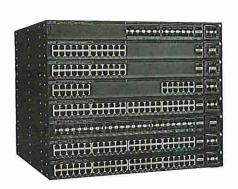
### RUCKUS ICX 7550 switch

RUCKUS

Mid-range enterprise-class stackable access/aggregation switch



The CommScope RUCKUS® ICX 7550 switch delivers the premium performance and scalability required for Wi-Fi 6 deployments and beyond with up to 48 ports of multigigabit connectivity and full 90 watts of 802.3bt PoE power per port with perpetual and fast-boot PoE support. It offers market-leading stacking density with up to 12 switches (up to 576 gigabit, multigigabit or fiber ports) per stack and combines chassis-level performance with "pay as you grow" scalability of a stackable solution. The mid-market stackable switch is one of the first in its class to offer 100 GbE uplinks, enabling enterprises to dramatically increase their network capacity while using their existing optical wire infrastructure.



#### Benefits

Maximum flexibility with gigabit/multigabit access and 1G/10G aggregation covers a broad range of deployment scenarios

#### Optimized for Wi-Fi 6 deployments and beyond

- Up to 12x 1/2.5/5/10G Multigigabit Ethernet ports
- Up to 36x 1/2.5G Multigigabit Ethernet ports

#### Power next generation PoE devices

- PoE+/802.3bt 60W/90W per port
- · Up to 1666W PoE budget with two power supplies

### 40 GbE and 100 GbE uplinks/stacking for maximum performance and future-proofing

- · Up to 3x 100 GbE uplink
- Up to 2x 100 Gbps stacking ports

#### Advanced L3 routing delivers design flexibility

- IPv4 and IPv6
- RIP, BGP, OSPF, VRRP, PIM, PBR, VRF

#### Security and data privacy

 MACsec 128-bit and 256-bit data encryption ensures compliance and data confidentiality

### Broad range of unified management options for maximum flexibility

· On Premises: SmartZone

Cloud Based: RUCKUS Cloud

Controllerless: RUCKUS Unleashed

Redundant, load-sharing power supplies enhance availability

The RUCKUS® ICX® 7550 series of mid-range stackable switches are purpose-built to provide wired connectivity at the edge of the network for the latest generation Wi-Fi 6 Access-Points. With high density multigigabit Ethernet ports and the latest 802.11bt 90W PoE power, the ICX 7550 delivers the performance, flexibility, and scalability required for the most demanding campus deployment scenarios.

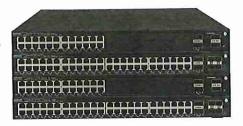
The ICX 7550 comes in 8 different models that can all be seamlessly stacked together to cover a broad range of deployment scenarios including gigabit or multigigabit network edge and 1/10 gigabit fiber for network aggregation or fiber to the room as well a smart building network edge with a class leading 2000W PoE budget and up to 90W of power delivery per port.

#### Multigigabit Network Edge



The RUCKUS ICX 7550 multigigabit models come in 24- and 48-port offering class leading multigigabit port density with a mix of 2.5G and 2.5/5/10G ports delivering the ultimate solution for Wi-Fi 6 access points Ethernet connectivity today while providing plenty of future proofing for deploying future generations of Wi-Fi APs.

#### Gigabit Ethernet Access



To complete the solution, The ICX 7550 Series includes four Gigabit Ethernet models, two with PoE support and two without. These models come in 24- and 48-port versions and can stack with the rest of the ICX 7550 series to offer traditional Gigabit ethernet connectivity for legacy Wi-Fi access points, VoIP phones, printers, laptop and desktop computers.

### 1/10 GbE Fiber Aggregation



The RUCKUS ICX 7550 fiber models come in 24- and 48-port versions with a mix of 1G and 10G SFP/SFP+ ports offering class leading port density as an entry level 10G aggregation solution for small to mid-size networks. The 24 ports model offers 24x 10GbE

ports while the 48 ports offers 36x 1GbE and 12 10GbE SFP/SFP+ ports. For maximum flexibility at the aggregation layer, the ICX 7550 support a broad range of L2/L3 protocols such as RIP, OSFP and BGP.

### Support for latest generation PoE standards

Latest generation of Wi-Fi access points comes with greater power requirements to support additional IoT radios and scale to a larger number of users. The ICX 7550 Multigigabit models all support 802.3bt with up to 90W power delivery per port as well as a class-leading 2000W PoE budget with two power supplies to maximize the supported number of powered devices. These PoE capabilities make the ICX 7550 ideally suited to provide connectivity and power delivery to the latest generation of smart buildings with PoE powered lighting and LED signage.

### Perpetual PoE and Fastboot PoE

All ICX 7550 PoE models support perpetual and fastboot PoE. Perpetual PoE keeps PoE devices powered without interruption when the switch is restarted, for example after a major SW upgrade or for any other reason. Fastboot PoE delivers power to PoE devices before the switch operating system has completed its boot sequence.

## 100 Gigabit Ethernet support for uplink and stacking

To ensure maximum performance and eliminate any network bottleneck considering the class leading multigigabit and 10GbE port density, the 7550 offers up to 3x100 GbE ethernet ports depending on model. Just like the other members of the ICX switch portfolio, the ICX 7550 can use 2 of these 100 GbE ports for stacking over fiber links and over distance up to 10km to maximize deployment flexibility and simplify switch configuration and management.

#### ICX 7550 series models

The RUCKUS ICX 7550 Series switches support up to 2 redundant hot swappable load sharing power supplies (AC or DC), up to 3 hot swappable fans (exhaust or intake airflow), one RJ-45 Ethernet port for out of band network management, one USB Type-C port for console management, one RJ-45 port for serial console management, and one USB port for external file storage.

The ICX 7550 offers two 40GbE QSFP+ or two 40/100 GbE QSFP28 uplink/stacking ports (see below for details)

One optional uplink/stacking module may also be installed.



3 hot-swap fans (N+1 redundancy)

USB storage, RJ45 serial port, RJ45 Ethernet management port

TIONAL UPLINK STACKING	MODULES
CLAN (1700)	RUCKUS ICX 7650/7550 1X100GQ Module  1x40/100GE QSFP28 uplink port  Delivers up to 100 Gbps of uplink bandwidth  Only available for -24ZP, -48ZP, -24F, 48F models
	RUCKUS ICX 7650/7550 2X40GQ Module  • 2x40GE QSFP+ uplink port  • Delivers up to 80 Gbps of uplink bandwidth
	RUCKUS ICX 7650/7550 4X10GF Module  • 4x10GE SFP+ uplink port with MACsec 128-bit or 256-bit support  • Delivers up to 40 Gbps of uplink bandwidth

	RUCKUS RPS22 AC PoE Power Supplies with standard or reversed airflow  Up to 1200W (@180-240V) power rating  Up to 1000W (@180-240V) PoE budget (2000W with 2 power supplies)  Supported on the RUCKUS ICX 7550-24/48P and ICX 7650-24/48ZP  Power supply side exhaust front-to-back (RPS22-E) or power supply side intake back-to-front (RPS22-I) airflow for maximum flexibility in DC deployment
	RUCKUS RPS21 AC No-PoE Power Supplies with standard or reversed airflow  400W power rating  Supported on the ICX 7550-24/48 and ICX 7550-24/48F  Power supply side exhaust front-to-back (RPS21-E) or power supply side intake back-to-front (RPS21-I) airflow for maximum flexibility in DC deployment
DC, No-POE	RUCKUS RPS21DC DC No-PoE Power Supplies with standard or reversed airflow  • 400W power rating  • Supported on the ICX 7550-24/48 and ICX 7550-24/48F  • Power supply side exhaust front-to-back (RPS21DC-E) or power supply side intake back-to-front (RPS21DC-I) airflored.

#### Enterprise-class features across RUCKUS ICX switches

The RUCKUS ICX switch family delivers the enterprise class features for flexibility, scalability and simplified management.

RUCKUS technology delivers unmatched flexibility, scalability and simplified management for campus network deployments. RUCKUS ICX 7000 switches provide customers the benefits of a traditional chassis, with the flexibility of stackable switches at a dramatically reduced Total Cost of Ownership (TCO).

**Advanced stacking:** goes beyond traditional stacking with capabilities that take flexibility, ease of management and cost effectiveness to then next level, including

- · Stacking on standard Ethernet ports
- · Long-distance stacking
- · No hardware module required for stacking
- · In Service Software Upgrade (ISSU) to minimize downtime
- · Superior scalability with the industry-leading number of switches per stack
- · Stacking at the access, aggregation and core layers

Enterprise-Class Availability: improve resiliency and minimize downtime, including:

- · Hitless stack failover
- · Hot-insertion/removal of stack members
- · Redundant power supplies
- In Service Software Upgrades for switch stacks

Unified wired and wireless network management: with RUCKUS SmartZone network controller or RUCKUS Cloud:

- Centralizes management of the entire family of RUCKUS switches and wireless Access Points with a single easy to deploy
  management platform
- · Discovers, monitor, and deploys configurations to groups of switches and wireless APs

**Network Automation:** with RUCKUS SmartZone and RUCKUS Cloud delivering capability like zero touch provisioning and automated software upgrade as well as integration with open automation platform like Ansible.

On-boarding and security policies: across ICX switches and wireless networks.

OpenFlow 1.3 protocol support in hybrid mode: allows user to deploy traditional Layer 2/3 forwarding with OpenFlow on the same port for Software Defined Network (SDN) enabled programmatic control of the network

Open Standards based management, monitoring and authentication

- sFlow-based network monitoring to help analyze traffic statistics and trends on every link and overcome unexpected network congestion
- Open-standards management includes Command Line Interface (CLI), Secure Shell (SSHv2), Secure Copy (SCP), and SNMPv3
- Support for Access Controller Access Control System (TACACS/TACACS+) and RADIUS authentication helps ensure secure operator access
- LLDP and LLDP-MED protocol support for configuring, discovering, and managing network infrastructure such as QoS, security
  policies, VLAN assignments, PoE power levels, and service priorities

## RUCKUS ICX 7550 switch specifications

	Non-PoE	Switches						
	RUCKUS ICX 7550-24	RUCKUS ICX 7550-48	RUCKUS ICX 7550-24P	RUCKUS ICX 7550-48P	RUCKUS ICX 7550-24ZP	RUCKUS ICX 7550-48ZP	RUCKUS ICX 7550-24F	RUCKUS ICX 7550-48F
Switching capacity (data rate, full duplex)	368 Gbps	416 Gbps	368 Gbps	416 Gbps	700 Gbps	1,020 Gbps	880 Gbps	912 Gbps
Forwarding capacity (data rate, full duplex)	274 Mpps	309 Mpps	274 Mpps	309 Mpps	521 Mpps	759 Mpps	655 Mpps	678 Mpps
10/100/1000 Mbps RJ45	24	48	24	48	24	48		
10/100/1000 Mbps/2.5 Gbps RJ45 (full duplex only)					12	36		
100/1000 Mbps/2.5/5/10 Gbps RJ45 downlinks (full duplex only)					12	12		
Fixed ports: 100/1000 Mbps SFP downlinks								36
Fixed ports: 1/10 Gbps SFP/SFP+ downlinks							24	12
Modular ports: 1/10 Gbps SFP/SFP+ uplinks	4	4	4	4	4	4	4	4
40 Gbps QSFP+ uplinks (max)	4	4	4	4				
40/100 Gbps QSFP28 uplinks (max)					4 x 40 or 2 x 100	4 x 40 or 3 x 100	4 x 40 or 2 x 100	4 x 40 or 3 x 100
PoE/PoE+ ports			24	48	24	48		
Perpetual / Fast boot Poe ports			24	48	24	48		
802.3bt (90W) ports					24	48		
Base IPv4/v6 L3 routing (Static routing, RIP)	<b>✓</b>	1	✓	✓	/	1	✓	✓
Advanced IPv4/v6 L3 routing (BGP, OSPF, RIP, VRRP, PIM, PBR features)	With license	With license	With license	With license	With license	With license	With license	With license
Aggregated Stacking Bandwidth	960	Gbps	960 Gbps		2.4 Tbps		2.4 Tbps	
Stacking density (Max switches in a stack)		12	12		12		12	
Stacking ports (Max ports usable for stacking)	Up to 2 x 40G QSFP+		Up to 2 x 40G QSFP+		Up to 2x 100G QSFP28		Up to 2x 100G QSFP28	
Max stacking distance (between stacked switches)	10	Km	10 Km		10 Km		10 Km	

### RUCKUS ICX 7550 switch specifications

Non-PoE Switches				Multigigabit PdE		Fiber	
RUCKUS	RUCKUS	RUCKUS	RUCKUS	RUCKUS	RUCKUS	RUCKUS	RUCKUS
ICX 7550-24	ICX 7550-48	ICX 7550-24P	ICX 7550-48P	ICX 7550-24ZP	ICX 7550-48ZP	ICX 7550-24F	ICX 7550-48F

FEATURE				POX	VER				
Power inlet	C14 (AC), Dinkle 2EHDP-03P (DC)								
Input voltage/frequency	AC: 100 to 240 VAC @ 50 to 60 Hz   DC: 40 to 60 VDC								
Power supply rated maximum output (AC)	2 x 4	00W	2 x 1030W (100-180V) 2 x 1200W (180-240V)				2 x 400W		
PoE power budget (AC) (two AC power supplies)				1666 W ( 2000 W (					
Power supply rated maximum output (DC)	2 x 4	oow	NA NA				2 x 400W		
Switch power consumption¹ (25°C) • 10% traffic² (no PoE load) • 100% traffic² (full PoE load)	53.2 W 135 W	65 W 142.7 W	68.5 W 1123.7 W	83.1 W 1131.6W	99.3 W 1152 W	139,7 W 1183.7 W	66.7 W 142.7 W	81.3 W 166.8 W	
Airflow		Front-to	o-back, or back-	to-front (depend	ing on power sup	oplies and fans in	stalled)		
Switch heat dissipation <sup>1,3</sup> (25°C) 10% traffic² (no PoE load)	181.4 BTU/hr	221.6 BTU/hr	233.6 BTU/hr	283.3 BTU/hr	338.6 BTU/hr	476.4 BTU/hr	227.4 BTU/hr	277.2 BTU/hr	

FEATURE	POWER							
Weight	6.11 kg 13.47 lb.	6.30 kg 13.89 lb.	6.74 kg 14.86 lb.	7.10 kg 15.65 lb.	6.98 kg 15.39 lb.	7.36 kg 16.23 lb.	6.04 kg 13.32 lb.	6.42 kg 14.15 lb.
Dimensions	Height: 4.4 cm, 1.73 inches			Width: 44.00 c	m, 17.32 inches	Depth: 40.64 cm, 16 inches		
Acoustics (at 35°C)	51 dBA	51 dBA	51 dBA	51 dBA	51 dBA	56.7 dBA	51 dBA	51 dBA
MTBF (25°C)	717,487 hours	612,791 hours	319,662 hours	304,125 hours	287,828 hours	213,665 hours	853,073 hours	532,359 hours

 $<sup>^{\</sup>rm 1}\,$  Switch includes one AC power supply, one fan, one 2×40 GbE QSFP+ uplink module

<sup>&</sup>lt;sup>2</sup> Traffic load on all ports connected with maximum possible PoE/PoE+ loads (if equipped).

<sup>&</sup>lt;sup>3</sup> PoE power not included in switch heat dissipation figures since the heat is not dissipated at the switch.

# RUCKUS ICX 7550 switch specifications

FEATURES	CAPABILITIES	
Connector options	RJ-45 ports: 10/100/1000 Mbps, 2.5/5/10 Gbps port SFP ports: 100 Mbps, 1 Gbps SFP+ ports: 10 Gbps QSFP+ ports: 40 Gbps QSFP28 ports: 100 Gbps RJ-45 port: Out-of-band Ethernet management: 10/ Console management: USB type C (Type C plug) and File Transfer: USB port, standard-A plug For the latest information about supported optics, pleas	100/1000 Mbps RJ-45 3 RJ <b>45</b>
DRAM NVRAM (flash) Packet Buffer Size	• 4 GB • 4 GB • 8 MB	
Maximum MAC addresses	16,000 (profile1), 114,000 (profile2), 32,000 (profile3)	
Maximum VLANs Maximum PVLANs	• 4095 • 256	
Maximum STP (spanning trees)	• 512	
Maximum VEs	• 512	
Maximum routes (in hardware)	<ul> <li>IPV4: 97280 (profile1), 8192 (profile2), 21504 (profile 3)</li> <li>IPV6: 8192 (profile1), 2048 (profile2), 17408 (profile 3)</li> </ul>	
Trunking	Maximum ports per trunk: 32     Maximum trunk groups: 256	
Maximum jumbo frame size	• 12,288 bytes	
QoS priority queues	• 48	
Multicast Groups	• 8192	
VRF	• 128 instances	
Layer 2 switching	802.1s Multiple Spanning Tree     802.1x Authentication     Auto MDI/MDIX     BPDU Guard, Root Guard     Dual-Mode VLANs     MAC-based VLANs, Dynamic MAC-based VLAN activation     Dynamic Voice VLAN Assignment     Dynamic VLAN Assignment     Fast Port Span     MVRP: Multiple VLAN Registration Protocol     IGMP Snooping (v1/v2/v3)     IGMP Proxy for Static Groups     IGMP v2/v3 Fast Leave     Inter-Packet Gap (IPG) adjustment     Link Fault Signaling (LFS)     MAC Address Filtering     MAC Learning Disable	MLD Snooping (v1/v2) Multi-device Authentication Per-VLAN Spanning Tree (PVST/PVST+/PVRST) Mirroring - Port-based, ACL-based, MAC Filter-based PIM-SM v2 Snooping Port Loop Detection Private VLAN Remote Fault Notification (RFN) Single-instance Spanning Tree Trunk Groups (static, LACP) Uni-Directional Link Detection (UDLD) Metro-Ring Protocol (MRP) (v1, v2) Virtual Switch Redundancy Protocol (VSRP) Q-in-Q and selective Q-in-Q VLAN Mapping Topology Groups VXLAN*

<sup>\*</sup> Supported in future software release.

# RUCKUS ICX 7550 switch specifications

EATURES	CAPABILITIES	
Base Layer 3 IP routing	<ul> <li>IPv4 and IPv6 static routes</li> <li>RIP v1/v2, RIPng</li> <li>ECMP</li> <li>Port-based Access Control Lists</li> <li>Layer 3/Layer 4 ACLs</li> </ul>	<ul> <li>Host routes</li> <li>Virtual Interfaces</li> <li>Routed Interfaces</li> <li>Route-only Support</li> <li>Routing Between Directly Connected Subnets</li> </ul>
Premium Layer 3 IP routing (with software license)	<ul> <li>IPv4 and IPv6 dynamic routes</li> <li>OSPF v2, OSPF v3 (IPv6)</li> <li>PIM-SM, PIM-SSM, PIM-DM, PIM passive (IPv4/IPv6 multicast routing functionality)</li> <li>PBR</li> <li>Virtual Route Redundancy Protocol VRRP v3 (IPv6)</li> </ul>	<ul> <li>VRRP-E (IPv4, IPv6)</li> <li>BGP4, BGP4+ (IPv6)</li> <li>GRE</li> <li>IPv6 over IPv4 tunnels</li> <li>VRF-lite (IPv4 and IPv6)</li> <li>MSDP</li> </ul>
Quality of Service (QoS)	<ul> <li>ACL Mapping and Marking of ToS/DSCP (CoS)</li> <li>ACL Mapping and Marking of 802.1p</li> <li>ACL Mapping to Priority Queue</li> <li>Classifying and Limiting Flows Based on TCP Flags</li> <li>DiffServ Support</li> <li>Honoring DSCP and 802.1p (CoS)</li> </ul>	<ul> <li>MAC Address Mapping to Priority Queue</li> <li>Priority Queue Management using Weighted Round Robin</li> <li>(WRR), Strict Priority (SP), and a combination of WRR and SP</li> </ul>
Traffic management	<ul> <li>ACL-based inbound rate limiting and traffic policies</li> <li>Broadcast, multicast, and unknown unicast rate limiting</li> </ul>	<ul> <li>Inbound rate limiting per port</li> <li>Outbound rate limiting per port and per queue</li> </ul>
Security	MACsec     802.1X authentication     MAC authentication     Flexible authentication     Web authentication     DHCP snooping     Dynamic ARP inspection     Neighbor Discovery (ND) Inspection     Tri-level Access Mode (EXEC, Privileged EXEC and Global Configuration)     EAP pass-through support     EEE 802.1X username export in sFlow	<ul> <li>Protection against Denial of Service (DoS) attacks Authentication, Authorization, and Accounting (AAA)</li> <li>MAC Address Locking MAC Port Security</li> <li>Advanced Encryption Standard (AES) with SSHv2</li> <li>RADIUS/TACACS/TACACS+</li> <li>Secure Copy (SCP)</li> <li>Secure Shell (SSHv2)</li> <li>Local Username/Password</li> <li>Change of Authorization (CoA) RFC 5176</li> <li>Trusted Platform Module</li> <li>Protected ports</li> <li>RADSEC (RFC 6614)</li> <li>Encrypted Syslog (RFC 5425)</li> </ul>
SDN features	<ul><li>OpenFlow v1.0 and v1.3</li><li>OpenFlow with hybrid port mode</li></ul>	<ul> <li>Operates with OpenDaylight SDN Controllers and the applications running on the controller</li> </ul>
IEEE standards compliance	802.1AB LLDP     802.1D MAC Bridging     802.1p Mapping to Priority Queue     802.1s Multiple Spanning Tree (MST)     802.1w Rapid Reconfiguration of Spanning Tree     802.1x Port-based Network Access Control (PNAC)     802.3 Carrier Sense Multiple Access/Collision Detection (CSMA/CD)     802.3ab 1000BASE-T     802.1 AX-2008 Link Aggregation     802.3ae 10 Gigabit Ethernet     802.3af Power over Ethernet	<ul> <li>802.3at Power over Ethernet Plus</li> <li>802.3bt 4-Pair Power over Ethernet</li> <li>802.3u 100Base-TX</li> <li>802.3x Full duplex and Flow Control</li> <li>802.3z 1000Base-SX/LX</li> <li>802.3bz Multi-gigabit Ethernet</li> <li>802.3 MAU MIB (RFC 2239)</li> <li>802.3ba 40 and 100 Gbps Ethernet</li> <li>802.1AE-MACsec (with license)</li> <li>802.3az Energy Efficient Ethernet</li> <li>802.1Q VLAN Tagging</li> </ul>
IETF RFC standards compliance	For a complete list of RFCs supported by the RUCKUS FastIron® software platform, please consult the "FastIron Features and Standards Support Matrix" document available from <a href="mailto:support.ruckuswireless.com//programs">support.ruckuswireless.com//programs</a> .	

# RUCKUS ICX 7550 switch specifications

FFATURES.		
High availability	<ul> <li>Redundant hot-swappable power supplies</li> <li>Hot-swappable fan trays</li> <li>Layer 3 VRRP/VRRP-E protocol redundancy</li> <li>Real-time state synchronization across the stack</li> </ul>	<ul> <li>Hitless failover and switchover from master to standby stack controller</li> <li>Hot insertion and removal of stacked units</li> <li>Layer 2 VSRP switch redundancy</li> <li>In Service Software Update (ISSU)</li> </ul>
Management	DHCP Auto Configuration Configuration Logging Digital Optical Monitoring Display Log Messages on Multiple Terminals Embedded Web Management (HTTP/HTTPS) Embedded DHCP Server Industry-standard Command Line Interface (CLI) RUCKUS SmartZone, RUCKUS Cloud, RUCKUS Unleashed Easy activation of optional software features USB file management and storage Boot from USB storage Macro for batch execution Out-of-band Ethernet Management ERSPAN support for remote traffic monitoring RSPAN TFTP TELNET Client and Server	<ul> <li>Bootp · SNMPv1/v2c</li> <li>DHCP Server and DHCP Relay</li> <li>SNMPv3 Intro to Framework</li> <li>Architecture for Describing SNMP Framework</li> <li>SNMP Message Processing and Dispatching</li> <li>SNMPv3 Applications</li> <li>SNMPv3 User-based Security Model</li> <li>SNMP View-based Access Control Model SNMP</li> <li>sFlow</li> <li>Network Time Protocol (NTP)</li> <li>Multiple Syslog Servers</li> <li>SCP</li> <li>Virtual Cable Tester (VCT)</li> <li>PTP Transparent clock*</li> <li>For Management MIB, please consult the "FastIron MIB Reference" document available from support. ruckuswireless.com//programs.</li> </ul>

ENVIRONMENT		
Temperature	<ul> <li>Operating: 0°C to 45°C (32°F to 113°F) at sea level</li> <li>Storage: -40°C to 70°C (-40°F to 158°F)</li> </ul>	
Humidity (noncondensing)	<ul> <li>Operating: 10% to 90% at 50°C (122°F)</li> <li>Storage: 5% to 95% at 70°C (158°F)</li> </ul>	
Altitude (above sea level)	<ul> <li>Operating: 0 to 3,048 m (10,000 feet)</li> <li>Storage: 0 to 12,000 m (39,370 feet)</li> </ul>	

Electromagnetic emissions	<ul> <li>FCC Class A (Part 15); EN 55022/CISPR-22 Class A; VCCI Class A; ICES-003 Electromagnetic Emission; AS/NZS 55022; EN 61000- 3-2 Power Line Harmonics; EN 61000-3-3 Voltage Fluctuation and Flicker EN 61000-6-3 Emission Standard</li> </ul>
Safety	<ul> <li>CAN/CSA-C22.2 NO. 60950-1-07; UL 60950-1; IEC60950-1; EN 60950-1:2006 Safety of Information Technology Equipment; EN 60825-1 Safety of Laser Products</li> </ul>
Immunity	<ul> <li>EN 61000-6-1 Generic Immunity and Susceptibility; EN 55024 Immunity Characteristics; EN 61000-4-3 Radiated, Radio Frequency, Electromagnetic Field; EN 61000-4-4 Electrical Fast Transient; EN 61000-4-5 Surge; EN 61000-4-6 Conducted Disturbances Induced by Radio-Frequency Fields; EN 61000-4-8 Power Frequency Magnetic Field; EN 61000-4-11 Voltage Dips and Sags</li> </ul>
Environmental regulatory compliance	RoHS-compliant (6 of 6); WEEE-compliant
Vibration	• IEC 68-2-36, IEC 68-2-6
Shock and drop	• IEC 68-2-27, IEC 68-2-32
Federal Certifications	CC*, FIPS*, USGv6*, JITC*

<sup>\*</sup> Future software release.

# RUCKUS ICX 7550 ordering information

SWITCH BUNDLES	
ICX7550-24-E2	24-port 10/100/1000 Mbps, 2x 40Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 400W AC power supplies and 3x fans, front to back airflow, port modules sold separately.
ICX7550-48-E2	48-port 10/100/1000 Mbps, 2x 40Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 400W AC power supplies and 3x fans, front to back airflow, port modules sold separately.
ICX7550-24P-E2	24-port 10/100/1000 Mbps 802.3at POE+, 2x 40 Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 1200W AC power supplies and 3x fans, front to back airflow, port modules sold separately.
ICX7550-48P-E2	48-port 10/100/1000 Mbps 802.3at POE+, 2x 40 Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 1200W AC power supplies and 3x fans, front to back airflow, port modules sold separately.
ICX7550-24ZP-E2	24-port with 12-port 10/100/1000 Mbps/2.5 Gbps 802.3bt POE++, 12-port 10/100/1000 Mbps/2,5/5/10 Gbps 802.3bt POE++, 2x 40/100 Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 1200W AC power supplies and 3x fans, front to back airflow, port modules sold separately.
ICX7550-48ZP-E2	48-port with 36-port 10/100/1000 Mbps/2.5 Gbps 802.3bt POE++, 12-port 10/100/1000 Mbps/2,5/5/10 Gbps 802.3bt POE++, 2x 40/100Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 1200W power supplies and 3x fans, front to back airflow, port modules sold separately.
ICX7550-24F-E2	24-port 1/10 Gbps SFP+, 2x 40/100 Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 400W AC power supplies and 3x fans, front to back airflow, port modules sold separately.
ICX7550-48F-E2	48-port with 36-port 100/1000 Mbps SFP, 12-port 1/10 Gbps SFP+, 2x 40/100 Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 400W AC power supplies and 3x fans, front to back airflow, port modules sold separately.

SWITCH BUNDLES WITH 3 YEARS REMOTE SUPPORT	
ICX7550-24P-E2-R3	24-port 10/100/1000 Mbps 802.3at POE+, 2x 40Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 1200W AC power supplies and 3x fans, front to back airflow, port modules sold separately. 3-year remote support included.
ICX7550-48P-E2-R3	48-port 10/100/1000 Mbps 802.3at POE+, 2x 40Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 1200W AC power supplies and 3x fans, front to back airflow, port modules sold separately. 3-year remote support included.
ICX7550-24ZP-E2-R3	24-port with 12-port 10/100/1000 Mbps/2.5 Gbps 802.3bt POE++, 12-port 10/100/1000 Mbps/2,5/5/10 Gbps 802.3bt POE++, 2x 40/100Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 1200W AC power supplies and 3x fans, front to back airflow, port modules sold separately. 3-year remote support included.
ICX7550-48ZP-E2-R3	48-port with 36-port 10/100/1000 Mbps/2.5 Gbps 802.3bt POE++, 12-port 10/100/1000 Mbps/2,5/5/10 Gbps 802.3bt POE++, 2x 40/100Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 1200W AC power supplies and 3x fans, front to back airflow, port modules sold separately. 3-year remote support included.
ICX7550-24F-E2-R3	24-port 1/10 Gbps SFP+, 2x 40/100Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 400W AC power supplies and 3x fans, front to back airflow, port modules sold separately. 3-year remote support included.
ICX7550-48F-E2-R3	48-port with 36-port 100/1000 Mbps SFP, 12-port 1/10 Gbps SFP+, 2x 40/100Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Bundle includes 2x 400W AC power supplies and 3x fans, front to back airflow, port modules sold separately.

BARE SWITCHES	
ICX7550-24	24-port 10/100/1000 Mbps, 2x 40Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Power supplies, fans and port modules sold separately.
ICX7550-48	48-port 10/100/1000 Mbps, 2x 40Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Power supplies, fans and port modules sold separately.
ICX7550-24P	24-port 10/100/1000 Mbps 802.3at POE+, 2x 40Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Power supplies, fans and port modules sold separately.
ICX7550-48P	48-port 10/100/1000 Mbps 802.3at POE+, 2x 40Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Power supplies, fans and port modules sold separately.
ICX7550-24ZP	24-port with 12-port 10/100/1000 Mbps/2.5 Gbps 802.3bt POE++, 12-port 10/100/1000 Mbps/2,5/5/10 Gbps 802.3bt POE++, 2x 40/100Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Power supplies, fans and port modules sold separately.
ICX7550-48ZP	48-port with 36-port 10/100/1000 Mbps/2.5 Gbps 802.3bt POE++, 12-port 10/100/1000 Mbps/2,5/5/10 Gbps 802.3bt POE++, 2x 40/100Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Power supplies, fans and port modules sold separately.

# RUCKUS ICX 7550 ordering information

ICX7550-24F	24-port 1/10 Gbps SFP+, 2x 40/100Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Power supplies, fans and port modules sold separately.
ICX7550-48F	48-port with 36-port 100/1000 Mbps SFP, 12-port 1/10 Gbps SFP+, 2x 40/100Gbps QSFP+ dual-mode uplink/stacking ports, modular slot. Power supplies, fans and port modules sold separately.

PORT MODULES	
ICX7650-1X100GQ	ICX 7650/7550 1-port 100GbE QSFP28 Module
ICX7650-2X40GQ	ICX 7650/7550 2-port 40GbE QSFP+ Module
ICX7650-4X10GF	ICX 7650/7550 4-port 1/10GbE SFP+ Module

POWER SUPPLIES AND FANS	
RPS22-E	ICX 7550 POE Power Supply, 1000/1200W AC, exhaust front to back airflow
RPS22-I	ICX 7550 POE Power Supply, 1000/1200W AC, intake back to front airflow
RPS21-E	ICX 7550 NO-POE Power Supply, 400W AC exhaust front to back airflow
RPS21-I	ICX 7550 NO-POE Power Supply, 400W AC intake back to front airflow
RPS21DC-E	ICX 7550 NO-POE Power Supply, 400W DC exhaust front to back airflow
RPS21DC-I	ICX 7550 NO-POE Power Supply, 400W DC intake back to front airflow
ICX-FAN12-E	Fan, ICX 7550, 7650 and ICX 7850 exhaust front to back airflow, front to back airflow support
ICX-FAN12-I	Fan, ICX 7550, 7650 and ICX 7850 intake airflow, back to front airflow support

FEATURE LICENSE AND ACCESSORIES	
ICX-MACSEC-LIC	ICX MACSEC license
ICX7550-PREM-LIC	ICX 7550 Layer 3 premium license
ICX-RMK-4POST-TL	ICX Tool-less 4-Post Rack Mount Kit
XBR-R000295	FRU, universal rack mount kit,4 post 24-32 depth RCK, ICX 7750/7650/7550/7450

OPTICS.	
See Optics Datasheet	RUCKUS offers a unique set of high-performance, reliable, and cost-effective optical transceivers to help enterprises and service providers meet the challenges of diverse network topologies. To ensure maximum quality, RUCKUS selects and tests the most reliable, highest-performing optical transceivers on the market, and then warrants their availability, capacity, and performance in RUCKUS® product." for the specific list of optics supported by each ICX product see the Optics Datasheet at <a href="https://www.commscope.com/product-type/enterprise-networking/optical-transceivers">www.commscope.com/product-type/enterprise-networking/optical-transceivers</a> .

<u>SmartZone</u>	SmartZone network controllers simplify network setup and management, enhance security, minimize troubleshooting and ease upgrades for networks built on RUCKUS switches and access points. Whether you're building complex multi-geo networks or delivering multi-tier managed networking services, SmartZone network controllers deliver the scale, flexibility and openness to support the most sophisticated deployment scenarios.
RUCKUS Cloud	RUCKUS Cloud takes the complexity of deploying and managing a distributed network out. It enables faster response to organizational needs while also reducing IT overhead. RUCKUS Cloud eliminates the need to deploy on-premises controllers and management software, moving network management to the cloud. Your multi-site network can be centrally managed through a single pane of glass web-based UI and full-featured mobile app.
Unleashed	Unleashed is a simple-to-setup, easy-to-run management solution in a package designed and priced for small businesses. With builtin controller functionality, there's no need to invest in a separate appliance for Wi-Fi control or in network management software. You can manage your entire network from your phone or web browser including all your APs and switches together.

#### Warranty

RUCKUS ICX 7550 Switches are covered by the RUCKUS Assurance Limited Lifetime Warranty. For details, visit <a href="https://www.commscope.com/globalassets/digizuite/1077-1067-ruckus-warranty-statement.pdf">www.commscope.com/globalassets/digizuite/1077-1067-ruckus-warranty-statement.pdf</a>.

#### Best-in-class support

RUCKUS ICX 7550 switches come with 90 days of free technical support from the RUCKUS Technical Assistance Center (TAC). For continued access to the TAC past the initial 90 days, customers must purchase a RUCKUS Technical Support contract. For details, visit <a href="mailto:support.">support.</a> ruckuswireless.com//programs.

#### Legal disclaimer

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# COMMSCOPE RUCKUS

# RUCKUS® Ethernet Optics

High quality transceivers for CommScope switches and APs

#### BENEFITS

# GUARANTEED COMPATIBILITY AND COMPLIANCE

- We guarantee compatibility with CommScope switches and APs and full compliance with industry standards.
   That's something you don't get from generic transceivers.
- Standards-based—802.3an, 802.3ah, 802.3u, 802.3ae, 802.3ak, 802.3ba, 802.3cu, SFF-8431, SFF-8402, SFF-8436, and SFF-8636—compliant as required
- Compliant with Restrictions on Hazardous Substances (RoHS), meeting RoHS 6 EU standards

#### **FACTORY TESTED**

 Every batch of CommScope transceivers is factory tested, so you're assured that they function properly and reliably

#### EASY TO DEPLOY AND UPGRADE

 Hot-swappable flexibility in the field for greater ease and lower total cost of ownership

# Highly reliable, RUCKUS-qualified optics

CommScope offers a unique set of high-performance, reliable, and cost-effective optical transceivers to help enterprises and service providers meet the challenges of diverse network topologies. To ensure maximum quality, CommScope selects and tests the most reliable, highest-performing optical transceivers on the market, and then warrants their availability, capacity, and performance in CommScope product.

Extensive performance and reliability testing reflects an ongoing commitment to quality. CommScope tests transceivers using the industry's most advanced tools and instruments to help ensure that they provide the right mix of functionality and performance when used in conjunction with CommScope products. The speed, capacity, reliability, and low cost of ownership that CommScope is known for is also provided in all optical components.

By using CommScope-qualified components, organizations can be assured that their quality, warranty and service requirements will be met and that their CommScope products will continually provide the uptime, performance, and reliability required by today's leading enterprise service providers.

#### **RUCKUS Global Services**

RUCKUS Global Services has the expertise to help organizations build scalable, efficient cloud infrastructures. Leveraging 20 years of expertise in storage, networking, and virtualization, RUCKUS Global Services delivers world-class professional services, technical support, network monitoring services, and education, enabling organizations to maximize their CommScope investments, accelerate new technology deployments, and optimize the performance of networking infrastructures.

#### Maximizing Investments

To help optimize technology investments, CommScope and its partners offer complete solutions that include professional services, technical support, and education. For more information, contact a CommScope sales partner or visit <a href="https://www.commscope.com">www.commscope.com</a>.

### **Ethernet Optics Family Features**

The RUCKUS Ethernet optics family includes several offerings designed to meet the performance and scalability requirements of service provider and enterprise environments.

100 MbE SFP OPTICS	
<ul> <li>100 Megabit Ethernet (MbE) transceivers support link lengths from 2Km to 40Km</li> <li>Both SMF and MMF fiber types</li> </ul>	RoHS 5 and 6 compliant     Enterprise switching and routing
1 GbE SFP OPTICS	
<ul> <li>1GbE transceivers support link lengths from 300m to 100Km</li> <li>Both SMF and MMF fiber types</li> <li>Coarse Wavelength Division Multiplexing (CWDM) support for distances of 80Km to 100Km</li> </ul>	<ul> <li>RoHS 5 and 6 compliant</li> <li>For core routers and security applications</li> </ul>
10 GbE SFP+ OPTICS	
<ul> <li>10GbE transceivers support link lengths of 26m to 80Km</li> <li>Protocol-independent</li> <li>Less than one-third the power and size of MSA optic</li> <li>Hot-swappable</li> <li>Digital Optical Monitoring (DOM) support</li> </ul>	<ul> <li>RoHS 5 and 6 compliant</li> <li>Application delivery and acceleration</li> <li>High-Performance Computing (HPC) interconnects</li> <li>Service provider traffic management</li> </ul>
25 GbE SFP28 OPTICS	
<ul> <li>25 GbE transceivers support link lengths of 70 m to 10 km</li> <li>Hot-swappable</li> <li>Digital Optical Monitoring (DOM) support</li> </ul>	<ul> <li>RoHS 6 compliant</li> <li>High-Performance Computing (HPC) interconnects</li> <li>Service provider traffic management</li> </ul>
40 GbE QSFP+ OPTICS	The Trade Miles of the Contract of the Contrac
40GbE transceivers support link lengths from 100 m to 40Km     Hot-pluggable     Industry-standard QSFP+	<ul> <li>Digital Optical Monitoring (DOM) support</li> <li>High-density 40GbE connectivity options for data center, enterprise and service provider applications</li> </ul>
100 GbE QSFP28 OPTICS	
100 GbE transceivers support link lengths up to 40 km     Hot-pluggable     Industry-standard QSFP28	<ul> <li>Digital Optical Monitoring (DOM) support</li> <li>Carrier, service provider, and cloud services</li> <li>Enterprise campus core routing</li> <li>RoHS 6 compliant</li> </ul>

## **Product Support for Fast Ethernet**

				ICX 7000 Series										
Fast Ethernet Optics	ICX 7150	ICX 7250	ICX 7450	ICX 7550	ICX 7650	ICX 7750	ICX 7850							
E1MG-100FX-OM	●1		0	•2	•									
E1MG-100FX-A	⊚1		0	•2	•									
E1MG-100FX-IR-OM	<b>●</b> <sup>1</sup>		•	•2	•									
E1MG-100FX-LR-OM			0	<b>o</b> <sup>2</sup>	0									

 $<sup>^{\</sup>rm 1}$  Only compatible with ICX7150-24F model. Requires FI software 9.0.10 or later..  $^{\rm 2}$  Requires FI software 8.0.95d or later.

### Product Support for 1 Gigabit Ethernet

			ICX	7000 Sei	ries					Access ints		Smart- Zone
1 GbE Fiber Optics	ICX 7150	ICX 7250	ICX 7450	ICX 7550	ICX 7650	ICX 7750	ICX 7850	T710	T750	T811cm	Fiber Back- pack	SZ144
E1MG-SX-OM	•	0	0		0	0	•	•	•	•	0	
E1MG-SX-OM-T	0	•	0	0	0		0	0		•		
E1MG-SX-A	•		•	0	. 0	•	0	0		•		
E1MG-LX-OM	•	•	0	0	0	0	0	0	•	•	•	
E1MG-LX-OM-T	0	0	•	•	0	0	0	0		0		
E1MG-LX-A	0	0	0	0	0	0	0	0		0		
E1MG-LHA-OM								0		0		
E1MG-LHA-OM-T	•	0	0	0	0		0	0		•	0	
E1MG-BXD	•	0		•	•	<b>e</b> <sup>1</sup>	0	0		•	0	
E1MG-BXU	•	0	•	0	0	e <sup>1</sup>	0			0	•	
E1MG-BXD-TA	<b>6</b> <sup>2</sup>	<b>9</b> <sup>2</sup>	<b>o</b> <sup>2</sup>	<b>o</b> <sup>2</sup>	<b>•</b> <sup>2</sup>		<b>©</b> <sup>2</sup>					
E1MG-BXU-TA	<b>o</b> <sup>2</sup>	<b>o</b> <sup>2</sup>	<b>o</b> <sup>2</sup>	<b>o</b> <sup>2</sup>	•2		<b>o</b> <sup>2</sup>					
E1MG-TX	•	0	0		•	0	0					
E1MG-TX-A	•	9	0	0	•	0	•					
E1MG-CWDM80-XXXX												
1G-SFP-TWX-XXXX	0	0										

Optics supported for both stacking links and Ethernet data links.

Optics supported for Ethernet data links only (i.e. not for stacking).

<sup>&</sup>lt;sup>1</sup> Requires FI software 8.0.30b or later.

<sup>&</sup>lt;sup>2</sup> Requires FI software 9.0.0 or later.

### **Product Support for 10 Gigabit Ethernet**

			ICX	7000 Sei	ries				Wi-Fi Aco	ess Point	s	Smart- Zone
10 GbE Fiber Optics	ICX 7150	ICX 7250	ICX 7450	ICX 7550	ICX 7650	ICX 7750	ICX 7850	T710	T750	T811cm	Fiber Backpack	SZ144
IOG-SFPP-USR	0	0	0	0	0	0	•					
IOG-SFPP-USR-SA	0	0	0	0	0	0	•					
IOG-SFPP-SR	0	0	0	0	•	0	•		•		311	•
10G-SFPP-SR-SA	0	0	0	0	0	0	•					0
10G-SFPP-SR-S	0	0	0	•	0	0	0					0
10G-SFPP-LR	0	0	0	•	0	0	0		0			0
10G-SFPP-LR-SA	0	0	0	•	0	0	•					0
10G-SFPP-LR-S	0	0	0	0	0	0	•					0
10G-SFPP-ER	•	0	•	0	0	•	•					
10G-SFPP-ZR	•	0			0	0	0					
10G-SFPP-LRM	-		•	•5	0		•4					
10G-SFPP-LRM-X-ADP	e <sup>1</sup>	e <sup>1</sup>				•¹						
10G-SFPP-BXD-S	0	0	0	•	0	0	•					
10G-SFPP-BXU-S	0	0	0	0	0	0	•					
10G-SFPP-TX-A		o <sup>3</sup>		•3		<b>e</b> <sup>3</sup>	<b>o</b> <sup>3</sup>					
10G-SFPP-TX-LP-A	•6	•6	<b>6</b>	<b>o</b> 6	<b>o</b> 6		<b>o</b> 6					
10G-SFPP-TWX-XXXX	0	0	0	•	0	0	0					
10G-SFPP-TWX-P-XXXX	O <sup>2</sup>	0	0	0	•	0						
10GE-SFPP-AOC-XXXX		0	0	0	0	0	0					

O Optics supported for both stacking links and Ethernet data links.

Optics supported for Ethernet data links only (i.e. not for stacking).

Requires FI software 8.0.61 or later.

<sup>Stacking and uplinks not supported with the 5-meter passive cable on the 7150. 3-meter passive cable does not support cross-connection stacking on ICX7150 (for example, from n/3/1 to n/3/3); however, the cables can be used for same-port connections (for example, n/3/1 to n/3/1). ). <a href="https://support.ruckuswireless.com/articles/000011828">https://support.ruckuswireless.com/articles/000011828</a>

Requires FI software 8.0.90a or later. Due to the high-power consumption, there is a limit on how many transceivers that can be installed, please refer to <a href="https://support.ruckuswireless.com/articles/000011205">https://support.ruckuswireless.com/articles/000011828</a></sup> 

<sup>&</sup>lt;sup>4</sup> Optics supported only on the ICX7850-48FS natively.

<sup>&</sup>lt;sup>5</sup> Optics supported only on the ICX7650-4X10GF modules.

<sup>&</sup>lt;sup>6</sup> Requires FI software 8.0.95e or 9.0.10 and later.

#### Product Support for 25 Gigabit Ethernet

	ICX 7000 Series									
25 GbE Fiber Optics	ICX 7150	ICX 7250	ICX 7450	ICX 7550	ICX 7650	ICX 7750	ICX 7850			
E25G-SFP28-SR							•			
E25G-SFP28-LR							•			
E25G-SFP28-AOC-1001							<b>6</b> 1			
E25G-SFP28-TWX-P-XXXX							0			

#### **Product Support for 40 Gigabit Ethernet**

				ICX 7000 Series			
40 GbE Fiber Optics	ICX 7150	ICX 7250	ICX 7450	ICX 7550	ICX 7650	ICX 7750	ICX 7850
E40G-QSFP-SR4			0	0	0	0	0
E40G-QSFP-SR4-INT	TA CONTRACTOR			⊕5,6		0	⊕5,6
E40G-QSFP-ESR4				0	0	0	0
E40G-QSFP-LR4			0	0	0	0	0
E40G-QSFP-LR4-A			O <sup>5</sup>	O <sup>5</sup>	O <sup>5</sup>		O <sup>5</sup>
E40G-QSFP-LR4-INT				⊜5,6		0	●5,6
E40G-QSFP-LM4			0	0	0	0	0
E40G-QSFP-ER4			0	0	0	0	0
E40G-QSFP-SR-BIDI			•	0	0	0	0
E40G-QSFP-4SFP-C-XXXX				<b>o</b> <sup>5</sup>		0	0
E40G-QSFP-4SFP-AOC-XXXX				●5		•	•
E40G-QSFP-QSFP-C-XXXX			0	0	0	0	0
E40G-QSFP-C-XXXXX			O <sup>1</sup>	O <sup>1</sup>	O <sup>1</sup>	O <sup>1</sup>	O <sup>1</sup>
40G-QSFP-C-005XX			0	0	0	0	0
40G-QSFP-C-005XX-A			O <sup>3</sup>	O <sup>3</sup>	O <sup>3</sup>	O <sup>3</sup>	O <sup>3</sup>
E40G-QSFP-QSFP-P-XXXX			0	0	0	0	0
E40G-Q-Q-C-XXXX-A			⊙4	⊙4	O <sup>4</sup>	⊙4	O <sup>4</sup>
E40G-QSFP-QSFP-AOC-XXXX				0	0	0	0

Optics supported for both stacking links and Ethernet data links.

Optics supported for both stacking links and Ethernet data links.
Optics supported for Ethernet data links only (i.e. not for stacking).

<sup>&</sup>lt;sup>1</sup> Requires FI software 8.0.90a or later.

Optics supported for Ethernet data links only (i.e. not for stacking).

Stacking not supported with the 5-meter passive cable.

Breakout is not supported for ICX7650.

<sup>&</sup>lt;sup>3</sup> Requires FI software 8.0.95b or later.

<sup>&</sup>lt;sup>4</sup> Requires FI software 8.0.95c or later.

<sup>&</sup>lt;sup>5</sup> Requires FI software 9.0.0 or later.

Supports 1G breakout starting 9.0.10 or later

## **Product Support for 100 Gigabit Ethernet**

				ICX 7000 Series			
100 GbE Fiber Optics	ICX 7150	ICX 7250	ICX 7450	ICX 7550	ICX 7650	ICX 7750	ICX 7850
E100G-QSFP28-SR4				O <sub>3</sub>	0		0
E100G-QSFP28-SR4-A				O <sup>4</sup>	O <sup>4</sup>		O <sup>4</sup>
E100G-QSFP-ESR4			F1 7 E	O <sup>3</sup>	0		0
E100G-QSFP28-DR1				• <sup>2</sup>	<b>o</b> <sup>2</sup>		<b>e</b> <sup>2</sup>
E100G-QSFP28-CWDM4-2KM				O <sub>3</sub>	•		0
E100G-QSFP28-LR4L-2KM					0		
E100G-QSFP28-FR1				•2	• <sup>2</sup>		•2
E100G-QSFP28-LR4-10KM					0		
E100G-QSFP28-LR4-LP-10KM				O <sup>3</sup>	0		0
E100G-QSFP28-LR1				<b>o</b> <sup>2</sup>	•2		•2
E100G-QSFP28-ER4				•2	<b>●</b> <sup>2</sup>		e <sup>1</sup>
E100G-QSFP-QSFP-AOC-XXXX				0	0		•
E100G-QSFP-QSFP-P-XXXX				O <sup>3</sup>	0		0
E100G-QSFP-4SFP-P-XXXX				⊙4			•

o Optics supported for both stacking links and Ethernet data links.

Optics supported for Ethernet data links only (i.e. not for stacking).

<sup>&</sup>lt;sup>1</sup> Requires FI software 8.0.92a or later.

<sup>&</sup>lt;sup>2</sup> Requires FI software 8.0.95 or later.

<sup>&</sup>lt;sup>3</sup> Requires FI software 8.0.95c or later to stack.

<sup>&</sup>lt;sup>4</sup> Requires FI software 9.0.0 or later.

# **Key Standards and Features**

	IEEE Standards	Domestic Safety Standards	International Safety Standards	Wavelength (nm)	Fiber Type	Maximum Cable Distance	Digital Optical Monitoring
Part Number							
E1MG-100FX-OM E1MG-100FX-A	802.3u	FDA 21CFR 1040.10 Class 1, CSA 60950-1-	EN 60825-1,	1,310	MMF	2Km	Yes
E1MG-100FX-IR-OM	802.3		EN 60950-1		SMF	15Km	Yes
E1MG-100FX-LR-OM	802.3	03/ UL 60950-1		1,310	SMF	40Km	Yes

Part Number				1 GbE Fiber			A
E1MG-SX-OM/ E1MG-SX-OM-T E1MG-SX-A	802.3z			850	MMF	220m to 550m	Yes
E1MG-LX-OM/ E1MG-LX-OM-T E1MG-LX-A	802.3z			1,310	MMF/SMF	550m to 10Km	Yes
E1MG-LHA-OM/ E1MG-LHA-OM-T	802.3z	FDA 21CFR 1040.10		1,550 70Km  TX: 1,490 10Km	70Km	Yes	
E1MG-BXD	802.3ah	Class 1, CSA 60950-1-03/	EN 60825-1, EN 60950-1		10Km	No	
E1MG-BXU	802.3ah	UL 60950-1		TX: 1,310 RX: 1,490		10Km	No
E1MG-BXD-TA	802.3ah			TX: 1,490 RX: 1,310		20Km	Yes
E1MG-BXU-TA	802.3ah			TX: 1,310 RX: 1,490		20Km	Yes
E1MG-CWDM80-XXXX	802.3z			1,470 to 1,610		80Km	No

Part Number	1000BASE-T Copper										
E1MG-TX	802.3ab	CSA 60950-1- 03/UL	EN 60950-1	N/A	Cat5	100m	N/A				
1G-SFP-TWX-0x01	802.3z		Direct Attach SFP	1m, 5m	No						

Part Number				10 GbE Fiber			
10G-SFPP-USR	N/A			850	OM3 MMF	100m	
10G-SFPP-SR	802.3ae			850	OM3 MMF OM4 MMF	300m 400m	
10G-SFPP-LR	802.3ae	1		1,310	SMF	10Km	
10G-SFPP-ER	802.3ae	FDA 21CFR		1,550	SMF	40Km	
10G-SFPP-ZR	802.3ae	1040.10		1,550	SMF	80Km	
10G-SFPP-BXD-S	802.3ae	- Class 1, CSA 60950- 1-03/ UL 60950-1	EN 60825-1, EN 60950-1	1330-TX/ 1270-RX	SMF 10Km	Yes	
10G-SFPP-BXU-S	802.3ae	000000		1270-TX/ 1330-RX	SMF	10Km	
10G-SFPP-LRM	802.3ae			1,310	OM1/OM2 OM3 MMF OM4 MMF	220m 300m	
10G-SFPP-TX-LP-A	802.3an	CSA 60950-1- 03/UL	EN 60950-1	N/A	Cat 6a/7	30m	No

## Keu Standards and Features

	IEEE Standards	Domestic Safety Standards	International Safety Standards	Wavelength (nm)	Fiber Type	Maximum Cable Distance	Digital Optical Monitoring
Part Number			10	GBASE DAC CABI	.E.		
IOG-SFPP-TWX-XXXX	802.3ak	Direct	t Attach SFP+ Twir	ax active copper ca	ibles	1m, 3m, 5m	No
IOG-SFPP-AOC-XXXX	N/A	D	irect Attach SFP+	active optical cables		7m, 10m	Yes
10G-SFPP-TWX-P-XXXX	802.3ak	Direct	Attach SFP+ Twin	ax passive copper c	ables	1m, 3m, 5m	No
Part Number	1		2	5 GbE SFP28 FIBE	R		
E25G-SFP28-SR	802.3by	North A UL/CSA 60950,		850	OM3 MMF OM4 MMF	70m 100m	Yes
E25G-SFP28-LR	802.3bm	Europea EN 60950, EB		1295, 1300, 1305, 1310	SMF	10Km	163
Part Number	ST 24 1 14		25 (	SbE SFP28 DAC CA	ABLE		
E25G-SFP28-AOC-1001	N/A	Direct Attach S	FP28 to SPP28 a	ctive direct attach	copper cables	10m	No
E25G-SFP28-TWX-P- 00xxx	N/A	Direct Attach SFP28 to SPP28 pa		ssive direct attac	n copper cables	0.5m, 1m, 3m	N/A
Part Number				40 GbE Fiber			
E40G-QSFP-SR4	802.3ba				OM3 MMF OM4 MMF	100m 150m	Yes
E40G-QSFP-SR4-INT (compatible with 10GBASE-SR)	802.3ba			850	OM3 MMF OM4 MMF	100m 150m	Yes
E40G-QSFP-LR4 E40G-QSFP-LR4-A	802.3ba	FDA 21CFR		1264.5 to 1337.5	SMF	10Km	Yes
E40G-QSFP-LR4-INT	802.3ba	1040.10	EN 60825-1,	1310	SMF	10Km	Yes
E40G-QSFP-ER4	802.3ba	Class 1, CSA 60950-1-03/UL 60950-1	EN 60950-1	1264.5 to 1337.5	SMF	40Km	Yes
E40G-QSFP-ESR4	802.3ba			850	OM3 MMF OM4 MMF	300m 400m	Yes
E40G-QSFP-LM4	802.3ba			1264.5 to 1337.5	OM3/OM4 MMF	160m	Yes
		1			01/12/01/1		

OM3/OM4

MMF

100m

No

850 to 900

Specifications subject to change.

E40G-QSFP-SR-BIDI

802.3ba

# **Key Standards and Features**

	IEEE Standards	Domestic Safety Standards	International Safety Standards	Wavelength (nm)	Fiber Type	Maximum Cable Distance	Digital Optical Monitoring
Part Number	14.21-317		4	0 GbE DAC CABL	E THE		
E40G-QSFP-4SFP-C- XXXX	N/A	Direct Atta	ch QSFP+ to 4 SFP+	active copper bre	akout cables	1m, 3m, 5m	No
E40G-QSFP-QSFP-C- XXXX E40G-Q-Q-C-XXXX-A	N/A	Direct Attach QSFP+ to QSFP+ active copper cables			1m, 3m, 5m	No	
40G-QSFP-C-005XX E40G-QSFP-C-XXXX E40G-QSFP-QSFP-P- XXXX	N/A	Direct Attach QSFP+ to QSFP+ passive copper cables			0.5m, 1m, 3m, 5m	No	
E40G-QSFP-QSFP-AOC- XXXX	N/A	Direc	t Attach QSFP+ to C	SFP+ active optica	l cables	10m	No
E40G-QSFP-4SFP-AOC- XXXX	N/A	Direct Attach QSFP+ to 4 SFP+ active optical breakout cables			10m	No	

Part Number	100 GbE QSFP28 FIBER					
E100G-QSFP28-SR4 E100G-QSFP28-SR4-A	802.3bm		850	OM4 MMF	100m	
E100G-QSFP-ESR4	802.3bm		850	OM4 MMF	300m	
E100G-QSFP28-DR1	802.3cu		1311	SMF	500m	
E100G-QSFP28-CWDM4- 2KM	802.3am	North America:	1310	SMF	2Km	
E100G-QSFP28-LR4L- 2KM	802.3ba	UL/CSA 60950, CDRH Class 1 European Union:	1295, 1300, 1305, 1310	SMF	2Km	
E100G-QSFP28-FR1	802.3cu		1311	SMF	2Km	Yes
E100G-QSFP28-LR4- 10KM	802.3bm	EN 60950, EB 60825 Class 1	1295, 1300, 1305, 1310	SMF	10Km	
E100G-QSFP28-LR4-LP- 10KM	802.3ba		1295, 1300, 1305, 1310	SMF	10Km	
E100G-QSFP28-LR1	802.3cu		1311	SMF	10Km	
E100G-QSFP28-ER4L	802.3bm		1295, 1300, 1305, 1310	SMF	40Km	

Part Number		100 GbE QSFP28 I	DAC CABLE	
E100G-QSFP-QSFP- AOC-1001	N/A	Direct Attach QSFP28 to QSFP28 active optical cables	10m	No
E100G-QSFP-QSFP-P- XXXX	N/A	Direct Attach QSFP28 to QSFP28 passive copper cables	1m, 3m, 5m	N/A
E100G-QSFP-4SFP-P- XXXX	N/A	Direct Attach QSFP28 to 4 SFP28 passive copper breakout cables	1m, 3m, 5m	N/A

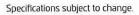
# TX and RX Power

		Ī	Х	R	Х
SKU	Description	Min (dBm)	Max (dBm)	Min (dBm)	Max (dBm)
E1MG-100FX-A / E1MG-100FX-OM	100BASE-FX SFP optic MMF, LC connector, optical monitoring capable	-20	-15	0	-30
E1MG-SX-A / E1MG-SX-OM	1000BASE-SX SFP optic, MMF, LC connector, optical monitoring capable	-9	-2.5	0	-18
E1MG-LX-A / E1MG-LX-OM	1000BASE-LX SFP optic, SMF, LC connector, optical monitoring capable	-9.5	-3	0	-19
10G-SFPP-USR / 10G-SFPP-USR-SA	10GBASE-USR, SFP+ optic (LC), target range 100m over MMF	-7.3	-1.3	-1	-11,1
10G-SFPP-SR / 10G-SFPP-SR-S / 10G-SFPP-SR-SA	10GBASE-SR, SFP+ optic (LC), target range 300m over MMF	-4.3	-1	-1	-11.1
10G-SFPP-LR / 10G-SFPP-LR-S / 10G-SFPP-LR-SA	10GBASE-LR, SFPP SMF (LC), for up to 10km over SMF	-8.2	0.5	0	-14.4
10G-SFPP-LRM	10GBASE-LRM SFP+ optic (LC), for up to 220m over MMF	-6.5	0.5	1.5	-6.5
E40G-QSFP-SR-BIDI	40GBASE-SR QSFP+ optic (LC), bidirectional, 100 m over OM3 MMF, 150 m over OM4 MMF	-4	5	-6	5
E40G-QSFP-LR4	40GBASE-LR4 QSFP+ optic (LC), for up to 10km over SMF	-6	3.5	-13.7	2.3
E100G-QSFP28-SR4	100GBASE-SR4 QSFP28 optic (MTP 1x12), for up to 100 m over MMF	-8.4	2.4	-10.3	2.4

## Max Distances with CommScope LazrSPEED® Multimode Fiber Cables

Thanks to advanced design and superior build quality, Commscope LazrSPEED fiber solutions expands the maximum distances specified in the standards.

	OM	4 MMF	OM	5 MMF
Part Number	Max distance on standard fiber	Max distance on CommScope LazrSPEED fiber	Max distance on standard fiber	Max distance on CommScope LazrSPEED fiber
10G-SFPP-SR 10G-SFPP-SR-SA 10G-SFPP-SR-S	400m	500m	400m	500m
E25G-SFP28-SR	100m	130m	100m	130m
E40G-QSFP-SR-BIDI	150m	150m	200m	210m
E40G-QSFP-SR4	150m	215m	150m	215m
E40G-QSFP-eSR4	400m	500m	400m	500m
E100G-QSFP28-SR4	100m	130m	100m	130m



Part Number	100 MbE SFP Transceivers
E1MG-100FX-A	100BASE-FX SFP optic MMF, LC connector, optical monitoring capable, TAA compliant
E1MG-100FX-A8	100BASE-FX SFP optic MMF, LC connector, optical monitoring capable, TAA compliant, 8-pack
E1MG-100FX-IR-OM	100BASE-FX IR SFP optic for SMF with LC connector, optical monitoring capable. For distances up to 15Km
E1MG-100FX-LR-OM	100BASE-FX LR SFP optic for SMF with LC connector, optical monitoring capable. For distances up to 40Km
E1MG-100FX-OM	100BASE-FX SFP optic MMF, LC connector, optical monitoring capable
E1MG-100FX-OM-8	100BASE-FX SFP optic MMF, LC connector, optical monitoring capable, 8-pack

Part Number	1 GbE SFP
E1MG-BXD	1000BASE-BXD SFP optic SMF, transmits at 1490nm and receives at 1310nm, LC connector, single strand SMF fiber. This optic should only be connected to an E1MG-BXU at the far end.
E1MG-BXU	1000BASE-BXU SFP optic SMF, transmits at 1310nm and receives at 1490nm, LC connector, single strand SMF fiber. This optic should only be connected to an E1MG-BXD at the far end.
E1MG-BXD-TA	1000BASE-BXD SFP optic SMF, transmits at 1490nm and receives at 1310nm, LC connector, 20km single strand SMF fiber, optical monitoring capable, industrial temperature (-40°C to 85°C), TAA Compliant. This optic should only be connected to an E1MG-BXU-TA at the far end.
:1MG-BXU-TA	1000BASE-BXU SFP optic SMF, transmits at 1310nm and receives at 1490nm, LC connector, 20km single strand SMI fiber, optical monitoring capable, industrial temperature (-40°C to 85°C), TAA Compliant. This optic should only be connected to an E1MG-BXD-TA at the far end.
E1MG-CWDM80-1470	1GbE CWDM SFP optic, 80Km, 1470nm, LC connector
1MG-CWDM80-1490	1GbE CWDM SFP optic, 80Km, 1490nm, LC connector
E1MG-CWDM80-1510	1GbE CWDM SFP optic, 80Km, 1510nm, LC connector
E1MG-CWDM80-1530	1GbE CWDM SFP optic, 80Km, 1530nm, LC connector
E1MG-CWDM80-1550	1GbE CWDM SFP optic, 80Km, 1550nm, LC connector
E1MG-CWDM80-1570	1GbE CWDM SFP optic, 80Km, 1570nm, LC connector
E1MG-CWDM80-1590	1GbE CWDM SFP optic, 80Km, 1590nm, LC connector
E1MG-CWDM80-1610	1GbE CWDM SFP optic, 80Km, 1610nm, LC connector
E1MG-LHA-OM	1000BASE-LHA SFP optic, SMF, LC connector, optical monitoring capable
E1MG-LHA-OM-T	1000BASE-LHA SFP optic, SMF, LC connector, optical monitoring capable, industrial temperature (-40°C to 85°C)
E1MG-LX-A	1000BASE-LX SFP Optic, SMF, LC connector, TAA compliant
E1MG-LX-A8	1000BASE-LX SFP Optic, SMF, LC connector, TAA compliant, 8-pack
E1MG-LX-OM	1000BASE-LX SFP optic, SMF, LC connector, optical monitoring capable
E1MG-LX-OM-8	1000BASE-LX SFP optic, SMF, LC connector, optical monitoring capable, 8-pack
E1MG-LX-OM-T	1000BASE-LX SFP optic, SMF, LC connector, optical monitoring capable, industrial temperature (-40°C to 85°C)
E1MG-SX-A	1000BASE-SX SFP Optic, MMF, (LC), TAA compliant
E1MG-SX-A8	1000BASE-SX SFP Optic, MMF, (LC), TAA compliant, 8-pack
E1MG-SX-OM	1000BASE-SX SFP optic, MMF, LC connector, optical monitoring capable
E1MG-SX-OM-8	1000BASE-SX SFP optic, MMF, LC connector, optical monitoring capable, 8-pack
E1MG-SX-OM-T	1000BASE-SX SFP optic, MMF, LC connector, optical monitoring capable, industrial temperature (-40°C to 85°C)
E1MG-TX	100/1000BASE-T SFP Copper, RJ-45 connector
E1MG-TX-A	100/1000BASE-T SFP Copper, RJ-45, TAA compliant
E1MG-TX-A8	100/1000BASE-T SFP Copper, RJ-45, TAA compliant, 8-pack
1G-SFP-TWX-0101	1GbE Direct Attach SFP to SFP active copper cable, 1m
1G-SFP-TWX-0501	1GbE Direct Attach SFP to SFP active copper cable, 5m

Part Number	10 GbE SFP+
OG-SFPP-BXD-S	10GBASE-LR SFP+ Optic (LC) bidirectional downstream, standard temperature (0°C to 70°C)
OG-SFPP-BXU-S	10GBASE-LR SFP+ Optic (LC) bidirectional upstream, standard temperature (0°C to 70°C)
OG-SFPP-ER	10GBASE-ER SFP+ optic (LC), for up to 40Km over SMF
OG-SFPP-ER-2	10GBASE-ER SFP+ optic (LC), for up to 40Km over SMF, 2-pack
OG-SFPP-LR	10GBASE-LR, SFP+ optic (LC), for up to 10Km over SMF
0G-SFPP-LR-8	10GBASE-LR, SFPP SMF (LC), for up to 10Km over SMF, 8-pack
OG-SFPP-LR-S	10GBASE-LR, SFPP SMF (LC), for up to 10Km over SMF, standard temperature (0°C to 70°C)
IOG-SFPP-LR-S8	10GBASE-LR, SFPP SMF (LC), for up to 10Km over SMF, standard temperature (0°C to 70°C), 8-pack
10G-SFPP-LR-SA	10GBASE-LR, SFP+ optic (LC), for up to 10Km over SMF, standard temperature (0°C to 70°C), TAA compliant
10G-SFPP-LR-SA8	10GBASE-LR, SFP+ optic (LC), for up to 10Km over SMF, standard temperature (0°C to 70°C), TAA compliant, 8-pac
10G-SFPP-LRM	10GBASE-LRM SFP+ optic (LC), for up to 220m over MMF
10G-SFPP-LRM-1-ADP	10GBASE-LRM SFP+ optic (LC), for up to 220m over MMF, w/ 1-LRM Optic, 1-Dual Port Adapter, & L-Bracket Mount for ICX7150, ICX7250 and ICX7750 (Optional 8 unit rack-mount shelf available)
10G-SFPP-LRM-2-ADP	10GBASE-LRM SFP+ Optic (LC), for up to 220m over MMF, w/ 2-LRM Optic, 1-Dual Port Adapter, & L-Bracket Mount for ICX7150, ICX7250 and ICX7750 (Optional 8 unit rack-mount shelf available)
10G-SFPP-LRM-8	10GBASE-LRM SFP+ optic (LC), for up to 220m over MMF, 8-pack
10G-SFPP-SR	10GBASE-SR, SFP+ optic (LC), target range 300m over MMF
10G-SFPP-SR-8	10GBASE-SR, SFPP MMF LC connector, 8-pack
10G-SFPP-SR-S	10GBASE-SR, SFPP MMF LC connector, standard temperature (0°C to 70°C)
10G-SFPP-SR-S8	10GBASE-SR, S FPP MMF LC connector, standard temperature (0°C to 70°C), 8-pack
10G-SFPP-SR-SA	10GBASE-SR, SFP+ optic (LC), target range 300m over MMF, standard temperature (0°C to 70°C), TAA compliant
10G-SFPP-SR-SA8	10GBASE-SR, SFP+ optic (LC), target range 300m over MMF, standard temperature (0°C to 70°C), TAA compliant, 8-pack
10G-SFPP-TWX-0101	10GbE Direct Attach SFP+ to SFP+ Active copper cable, 1m
10G-SFPP-TWX-0108	10GbE Direct Attach SFP+ to SFP+ Active copper cable, 1m, 8-pack
10G-SFPP-TWX-0301	10GbE Direct Attach SFP+ to SFP+ Active copper cable, 3m
10G-SFPP-TWX-0308	10GbE Direct Attach SFP+ to SFP+ Active copper cable, 3m, 8-pack
10G-SFPP-TWX-0501	10GbE Direct Attach SFP+ to SFP+ Active copper cable, 5m
10G-SFPP-TWX-0508	10GbE Direct Attach SFP+ to SFP+ Active copper cable, 5m, 8-pack
10G-SFPP-TWX-P-0101	10GbE Direct Attach SFP+ to SFP+ Passive copper cable, 1m
10G-SFPP-TWX-P-0108	10GbE Direct Attach SFP+ to SFP+ Passive copper cable, 1m, 8-pack
10G-SFPP-TWX-P-0301	10GbE Direct Attach SFP+ to SFP+ Passive copper cable, 3m
10G-SFPP-TWX-P-0308	10GbE Direct Attach SFP+ to SFP+ Passive copper cable, 3m, 8-pack
10G-SFPP-TWX-P-0501	10GbE Direct Attach SFP+ to SFP+ Passive copper cable, 5m
10G-SFPP-TWX-P-0508	10GbE Direct Attach SFP+ to SFP+ Passive copper cable, 5m, 8-pack
10G-SFPP-USR	10GBASE-USR, SFP+ optic (LC), target range 100m over MMF
10G-SFPP-USR-8	10GBASE-USR, SFP+ optic (LC), target range 100m over MMF, 8-pack
10G-SFPP-USR-SA	10GBASE-USR, SFP+ Optic (LC), Range 100m MMF, standard temperature (0°C to 70°C), TAA compliant

10G-SFPP-USR-SA8	10GBASE-USR, SFP+ Optic (LC), Range 100m MMF, standard temperature (0°C to 70°C), TAA compliant, 8-pack
10G-SFPP-ZR	10GBASE-ZR SFP+ optic (LC), for up to 80Km over SMF
10G-SFPP-ZR-2	10GBASE-ZR SFP+ Optic (LC), for up to 80Km over SMF, 2-pack
10GE-SFPP-AOC-0701	10GbE Direct Attach SFP+ to SFP+ Active Optical Cable, 7m
10GE-SFPP-AOC-1001	10GbE Direct Attach SFP+ to SFP+ Active Optical Cable, 10m
10G-SFPP-TX-A	10G-BASE-TX RJ-45 up to 30M over CAT 6a/7 cable TAA Applicable
10G-SFPP-TX-LP-A	10G-BASE-TX RJ-45 up to 30M over CAT 6a/7 cable TAA Applicable Low Power

Part Number	25 GbE SFP28
E25G-SFP28-SR	25GE SR SFP28 (LC), 100 m over MMF OM4, 70 m over MMF OM3, 1-pack
E25G-SFP28-LR	25GE LR SFP28 (LC), 10km over SMF, 1-pack
E25G-SFP28-AOC-1001	25GE SFP28 AOC 10m 1-pack
E25G-SFP28-TWX-P-00501	25GE Direct Attached SFP28 to SFP28 Passive Copper cable, 0.5m, 1-pack
E25G-SFP28-TWX-P-0101	25GE Direct Attached SFP28 to SFP28 Passive Copper cable, 1m, 1-pack
E25G-SFP28-TWX-P-0301	25GE Direct Attached SFP28 to SFP28 Passive Copper cable, 3m, 1-pack

Part Number	40 GbE QSFP+
E40G-QSFP-SR4	40GBASE-SR4 QSFP+ optic (MTP 1×8 or 1×12), 100m over MMF OM3. 150m over MMF OM4
E40G-QSFP-SR4-8	40GBASE-SR4 QSFP+ optic (MTP 1×8 or 1×12), 100m over MMF OM3. 150m over MMF OM4, 8-pack
E40G-QSFP-SR4-INT	40GBASE-SR4 QSFP+ optic (MTP 1x8 or 1x12), 100m over MMF, compatible with 10GBASE-SR, 10G breakout-capable
E40G-QSFP-ESR4	40GBASE-ESR4 QSFP+ optic (MTP 1x8 or 1x12), 300m over MMF
E40G-QSFP-ESR4-8	40GBASE-ESR4 QSFP+ optic (MTP 1x8 or 1x12), 300m over MMF, 8-pack
E40G-QSFP-ER4	40GBASE-ER4 QSFP+ optic (LC), for up to 40Km over SMF
E40G-QSFP-LR4	40GBASE-LR4 QSFP+ optic (LC), for up to 10Km over SMF
E40G-QSFP-LR4-8	40GBASE-LR4 QSFP+ optic (LC), for up to 10Km over SMF, 8-pack
E40G-QSFP-LR4-A	40GBASE-LR4 QSFP+ optic (LC), for up to 10Km over SMF TAA Compliant
E40G-QSFP-LR4-INT	40GBASE-LR4 QSFP+ to 4 SFP+ optic (MTP 1x8 or 1x12), for up to 10Km over SMF (compatible with 10GBASE-LR, 10G breakout-capable)
E40G-QSFP-LM4	40GBASE-LM4 QSFP+, 1310nm, 160m over duplex LC OM4 MMF
E40G-QSFP-SR-BIDI	40GbE SR QSFP+ optic (LC), bidirectional, 100m over OM3 MMF
E40G-QSFP-4SFP-AOC-1001	4x10GbE Direct Attach QSFP+ to 4 SFP+ Active Optical Breakout Cable, 10m
E40G-QSFP-4SFP-C-0101	4x10GbE Direct Attach QSFP+ to 4 SFP+ Active Copper Breakout Cable, 1m
E40G-QSFP-4SFP-C-0301	4x10GbE Direct Attach QSFP+ to 4 SFP+ Active Copper Breakout Cable, 3m
E40G-QSFP-4SFP-C-0501	4x10GbE Direct Attach QSFP+ to 4 SFP+ Active Copper Breakout Cable, 5m
E40G-QSFP-QSFP-AOC-1001	40GbE Direct Attach QSFP+ to QSFP+ Active Optical Cable, 10m
E40G-QSFP-QSFP-C-0101	40GbE Direct Attach QSFP+ to QSFP+ Active Copper cable, 1m
E40G-QSFP-QSFP-C-0301	40GbE Direct Attach QSFP+ to QSFP+ Active Copper cable, 3m
E40G-QSFP-QSFP-C-0501	40GbE Direct Attach QSFP+ to QSFP+ Active Copper cable, 5m
E40G-Q-Q-C-0101-A	40GbE Direct Attach QSFP+ to QSFP+ Active Copper cable, 1 m, TAA Compliant
E40G-Q-Q-C-0301-A	40GbE Direct Attach QSFP+ to QSFP+ Active Copper cable, 3 m, TAA Compliant

E40G-Q-Q-C-0501-A	40GbE Direct Attach QSFP+ to QSFP+ Active Copper cable, 5 m, TAA Compliant
40G-QSFP-C-00501	40GbE Direct Attach QSFP+ to QSFP+ Passive Copper Cable, 0.5m
40G-QSFP-C-00501-A	40GE QSFP Direct Attach Copper Cable, 0.5m, 1-pack, passive TAA Compliant
40G-QSFP-C-00508	40GbE Direct Attach QSFP+ to QSFP+ Passive Copper Cable, 0.5m, 8-pack
E40G-QSFP-C-0101	40GbE Direct Attach QSFP+ to QSFP+ Passive Copper Cable, 1m
E40G-QSFP-QSFP-P-0101	40GbE Direct Attach QSFP+ to QSFP+ Passive Copper Cable, 1m
E40G-QSFP-QSFP-P-0301	40GbE Direct Attach QSFP+ to QSFP+ Passive Copper Cable, 3m
E40G-Q5FP-C-0501	40GbE Direct Attach QSFP+ to QSFP+ Passive Copper Cable, 5m

Part Number	100 GbE QSFP28
E100G-QSFP28-SR4	100GBASE-SR4 QSFP28 optic (MTP 1x12), for up to 100m over MMF
E100G-QSFP28-SR4-A	100GBASE-SR4 QSFP28 optic (MTP 1x12), for up to 100m over MMF TAA Compliant
E100G-QSFP-ESR4	100GBASE-ESR4 QSFP+ optic (MTP 1x8 or 1x12), for up to 300m over MMF
E100G-QSFP28-DR1	100GBASE-DR QSFP28 PAM4 optic, LC, 500m over SMF, FEC enabled
E100G-QSFP28-CWDM4-2KM	100GBASE-CWDM4 QSFP28 optic (LC), for distances up to 2Km over SMF
E100G-QSFP28-LR4L-2KM	100GBASE-LR4 Lite QSFP28 transceiver 2Km over SMF
E100G-QSFP28-FR1	100GBASE-FR QSFP28 PAM4 optic, LC, 2km over SMF, FEC enabled
E100G-QSFP28-LR4-10KM	100GBASE-LR4 QSFP28 optic (LC), for distances up to 10Km over SMF
E100G-QSFP28-LR4-LP-10KM	100GBASE-LR4 Low Power, QSFP28 optic (LC), for distances up to 10Km over SMF
E100G-QSFP28-LR1	100GBASE-LR QSFP28 PAM4 optic, LC, 10km over SMF, FEC enabled
E100G-QSFP28-ER4L	100GBASE-ER4 Lite QSFP28 (LC), SMF, 30Km NO FEC, 40Km w/ FEC
E100G-QSFP-QSFP-P-0101	100GbE QSFP28 to QSFP28 Direct Attach, Passive Copper Cable, 1m
E100G-QSFP-QSFP-P-0301	100GbE QSFP28 to QSFP28 Direct Attach, Passive Copper Cable, 3m
E100G-QSFP-QSFP-P-0501	100GbE QSFP28 to QSFP28 Direct Attach, Passive Copper Cable, 5m
E100G-QSFP-QSFP-AOC-1001	100GbE QSFP28 to QSFP28 Direct Attach, Active Optical Cable, 10m
E100G-QSFP-4SFP-P-0101	4x25GE Direct Attached QSFP28 to 4 SFP28 PASSIVE Copper Breakout Cable, 1m, 1-pack
E100G-QSFP-4SFP-P-0301	4x25GE Direct Attached QSFP28 to 4 SFP28 PASSIVE Copper Breakout Cable, 3m, 1-pack
E100G-QSFP-4SFP-P-0501	4x25GE Direct Attached QSFP28 to 4 SFP28 PASSIVE Copper Breakout Cable, 5m, 1-pack

#### **Understanding Part Number Descriptions**

**Operating Temperature Ranges:** When no temperature range is mentioned in the description, the transceiver temperature range is 0°C to 85°C. "standard temperature" in the description means 0°C to 70°C. "industrial temperature" means -40°C to 85°C.

Multi-Unit Bundles: 8-pack means the SKU is a bundle of 8 units. 2-pack, a bundle of 2 units.

**TAA Compliance:** TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581). TAA requires that the U.S. Government may acquire only "U.S. made or designated country end products". This act requires that contractors must certify that each end product meets the applicable requirements. End products are 'those articles, materials and supplies to be acquired for public use'." This includes items which have been "substantially transformed" in the United States.

Active vs Passive Copper Cables: Direct attach passive copper cables have transceiver shaped connectors directly soldered to the cable without any active component in the system. Passive copper cables offer the shortest distances and they are the most affordable. CommScope recommends the use of passive copper cables for links between RUCKUS switches up to 3 meters. These cables should be the default choice for stacking RUCKUS switches together within a rack or across nearby racks.

Active copper cables include active components in the transceivers on each end of the cable. This enables Active copper cables to deliver a stronger signal and to support longer distances. However, they do cost more than their passive counterparts.

#### Warranty

RUCKUS optics are covered by the RUCKUS switching products standard limited warranty. For details, visit <a href="https://www.ruckuswireless.com/warranty">www.ruckuswireless.com/warranty</a>.

#### Legal disclaimer

Product features, functionality and specifications may change or be discontinued without notice. Nothing in this document shall be deemed to create a warranty of any kind, either express or implied, statutory or otherwise, including but not limited to, any implied warranties of merchantability, fitness for a particular purpose, non-infringement of third-party rights or availability with respect to any products and services.

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Further information regarding CommScope's commitment can be found at <a href="https://www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability">https://www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability</a>.



# **Section 4**



#### **ABOUT US**

#### **About Us**

AMS.NET is an innovative technology solution provider delivering business outcomes to organizations for more than 30 years. The company was established more than two decades ago to provide technical support to local school districts in California. Today, AMS.NET provides education, local government and businesses a comprehensive technology solution including design, implementation and support services.

With a consultative approach, consideration is taken to understanding technology requirements, existing equipment, industry, growth plan and budget. Leveraging proven and emerging technologies through leading manufacturers, AMS.NET's certified engineers' architect a solution that supports your initiatives and allows for future growth.

Prior to implementation, we can provide complete structured wiring services and post deployment, a host of managed services and maintenance plans to ensure your network and equipment are running at optimum performance.

Many financing options are available. With experience in the public sector around procurement vehicles, E-rate expertise and leasing options, we can make recommendations specific to your industry and technology solution.

Our extensive reference list is a tribute to our ability to successfully design, manage and implement technology solutions that support your initiatives. With more than 30 years of successfully providing technology solutions, you can be assured that we have the capability, experience and stability to be your trusted partner. And we'll be here for future needs!





Technology Solution Provider

### AMS.NET versus the Competition

- Established proven partner in your vertical
- 120+ employees throughout the state of California
- Multi-vendor network support
- Complete architecture solutions
- Elite manufacturer partnerships Cisco Gold Partner since 2007
- Skilled and Certified Engineers- CCIE's in networking, security, voice

- Advanced manufacturer technology specializations
- Structured cabling- C-7 Contractor and RCCD Certified
- Certified project management PMP Certification
- Executive management accessibility regardless of the customer size





#### COMPANY FACTS

#### **General Info**

Legal Name: AMS.NET Inc. Type: Delaware Corporation

Tax ID: 94-3291626

Principal Owner: Robert Tocci Years in Business: 33 Years Number of Employees: 115 Website: www.ams.net Email: sales@ams.net

Phone: 800-893-3660/925-245-6100

Fax: 925-245-6150

#### Locations:

Southern California Regional Offices: 12405 East Slauson Ave, Unit K,

Whittier, CA 90606, Phone 800-893-3660

Central Valley Regional Office: 1155 East North Avenue, Suite 106

Fresno, CA 93725, Phone 559-733-1641

Headquarters: 502 Commerce Way, Livermore, CA 94551-7812

Sacramento Regional Office: 5008 Donovan Drive Carmichael, CA 95608 Phone 800-893-3660

#### License and Procurement

DIR#: 1000001046 Expires 6/30/22

FCC RN: 0012300554 Contractor License C-7: 763508 Expires 4/30/22 DUNS#: 556116234

Microsoft MCSE's: 1673446, 2056976

**Procurement:** 

E-Rate: SPIN 143005880

Merced County FOCUS Contract: #2021092 SPURR Master Contract / PEPPM Contract NASPO Contracts- Cisco, HPE, Ruckus, Pure Storage, Palo Alto Networks

Cisco GSA Contract: GS-35F-0349S, Expires 4/4/26

**CMAS Contracts-Fortinet** APC

HP

Corning General Cable

Hitachi

Leviton

Ortronics

**Panduit** 

Leviton

Labor

Superior Essex

Arecont Vision Nimble Storage Palo Alto Networks Aruba Avigilon Rubrik

Bosch **Ruckus Wireless** Cisco

**TrippLite** Veeam

**VMware** 

**EMC** Berk-Tek Chatsworth Extron

#### Certifications and Specializations

Cisco Gold Certified Partner/ Cisco Meraki Partner

Cisco Specializations:

- Advanced Data Center Architecture
- Advanced Collaboration Architecture
- Advanced Security Architecture
- Advanced Enterprise Network Architecture
- Collaboration SaaS Authorization
- Customer Satisfaction Excellence
- Customer Experience Specialized

#### Partial Manufacturer List:

Cohesity

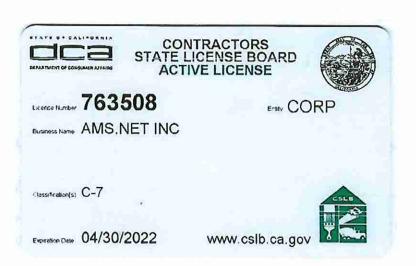
Eaton

Aruba HPE Platinum Partner, HPE Silver Partner, Ruckus Elite Partner, Palo Alto Networks, Fortinet, Barracuda, Aerohive, Pure Storage, Nimble Storage, Cohesity, DDN, Rubrik, Veeam Silver Pro Partner, Datrium, VMware Partner, Singlewire, FrontRow, Class Connection, AtlasIED, Extron, Advanced Network Devices, Avigilon, Verkada, OnSSI, Milestone, Arecont Vision, Hikvision, exacqVision, Tripplite, APC, Panduit, General Cable, Damac, Leviton, Berk-Tek, Ortronics, Hoffman, Cooper B-Line, Chatsworth, Superior Essex



#### **CONTRACTORS C-7 INFORMATION**

#### **C-7 Contractors License**



## **C-7 Responsible Managing Officer**

#### BOND OF QUALIFYING INDIVIDUAL

 The Responsible Managing Officer (RMO) TOCCI ROBERT MICHAEL certified that he/she owns 10 percent or more of the voting stock/equity of the corporation. A bond of qualifying individual is not required.

Effective Date: 04/12/2000



#### **CONTRACTORS C-7 INFORMATION**

#### **C-7 Contractors Bond** - Continued

#### **Business Information**

AMS.NET INC 502 COMMERCE WAY LIVERMORE, CA 94550 Business Phone Number: (925) 245-8100

> Entity Corporation Issue Date 05/24/1999 Reissue Date 04/12/2000 Expire Date 04/30/2022

#### License Status

This license is current and active.

All information below should be reviewed.

#### Classifications

C-7 - LOW VOLTAGE SYSTEMS

#### **Bonding Information**

#### Contractor's Bond

This license filed a Contractor's Bond with HANOVER INSURANCE COMPANY.

Bond Number: 1031231 Bond Amount: \$15,000 Effective Date: 01/01/2018

#### Contractor's Bond History

#### **Bond of Qualifying Individual**

The qualifying individual ROBERT MICHAEL TOCCI certified that he/she owns 10 percent or more of the voting stock/membership interest of this company; therefore, the Bond of Qualifying Individual is not required.

Effective Date: 04/12/2000



#### FCC RED LIGHT DISPLAY SYSTEM

## **AMS.NET's FCC Red Light Display System Status**

The Red Light Rule was adopted as part of the Federal Communication Commission's ongoing effort to implement the Debt Collection Improvement Act, which provides that the Commission checks to determine whether entities or individuals seeking licenses or other benefits from the FCC are delinquent in debt owed to the Commission. The Red Light Display System displays the current Green status of AMS.NET (FRN #0012300554).

#### **Red Light Display System View**

FCC | Fees | Red Light Display System

< FCC Site Map

Logged in as FRN: AMS.NET, Inc. (0012300554) [Log Out]

Back | Print | Help

#### 1/10/2022 11:06 AM

#### Current Status of FRN 0012300554

#### **STATUS: Green**

You have no delinquent bills which would restrict you from doing business with the FCC.

The Red Light Display System checks all FRNs associated with the same Taxpayer Identification Number (TIN). A green light means that there are no outstanding delinquent non-tax debts restricting business with the Commission by any FRN associated with requestor's TIN. The Red Light Display System was last updated on 01/10/2022 at 6:32 AM; it is updated once each business day at about 7 a.m., ET.



# **EVIDENCE OF COVERAGE**

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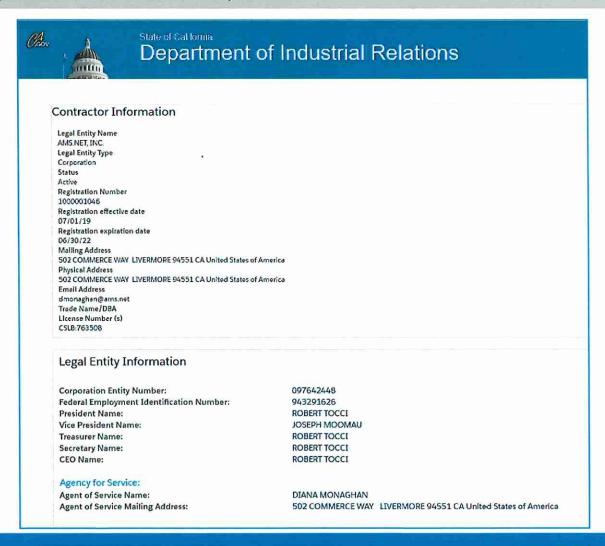


#### DEPARTMENT OF INDUSTRIAL RELATIONS

### **AMS.NET's Department of Industrial Relations**

SB 854, a budget trailer bill that was signed into law on June 20, 2014, and became effective immediately, made several significant changes to laws pertaining to the administration and enforcement of prevailing wage requirements by the Department of Industrial Relations (DIR). Among other things, SB 854 established a new public works contractor registration program to replace prior Compliance Monitoring Unit (CMU) and Labor Compliance Program (LCP) requirements for bond-funded and other specified public works projects. AMS.NET is a DIR registered contractor (DIR #1000001046).

#### Department of Industrial Relations System View





#### SPAC FILING

#### **Service Provider Annual Certification (SPAC)**

A service provider must submit a Service Provider Annual Certification (SPAC) (Form 473) to USAC each funding year to certify that it will comply with program rules. Below is proof captured from the SLD website.

**Purpose of Form:** Form 473 is used by the service provider each funding year to certify that it will comply with FCC rules concerning invoicing and documentation. The certifications apply to the entire funding year and are required before USAC will pay invoices. A service provider may submit one Form 473 for all Service Provider Identification Numbers (SPINs) assigned to it.

#### **SLD SPAC Filing Proof**

SPIN	Service Provider Name	Doing Business As	Contact Name	Contact Address	Contact Phone	Form 499 Filer	SPAC Filed
143005880	AMS.NET, Inc.	AMS.NET, Inc.	Robert	502 Commerce Way,	925245-6100		1998
			Tocci	Livermore, CA 94551			1999
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#### 800-893-3660 · www.ams.net

Corporate Headquarters - 502 Commerce Way, Livermore, CA 94551 Central Valley Regional Office- 1155 East North Ave., Suite 106, Fresno CA 93725 Sacramento Regional Office- 5008 Donovan Drive, Carmichael, CA 95608 Southern California Regional Office- 12405 East Slauson Avenue, Unit K, Whittier, CA 90606





825 N 300 W Suite C-149 Salt Lake City, UT 84103

855-233-3357 https://netdiverse.com/e-rate-services/ erate@netdiverse.com

Bryanda Ramirez Lakeside Union Sch Dist 14535 Old River Rd, Bakersfield, CA 93311

2/21/2022

Bryanda Ramirez,

We are pleased to provide you with this solution to your 2022 E-Rate Form 470 bid request.

#### NetDiverse has created a solution to align with YOUR technology needs.

We recommend the reliability and security of Cisco-Meraki hardware and software solutions for our education customers. Our years of experience in the Education sector provide insight into your technology demands, maximizing the benefits available from Cisco-Meraki hardware, Speedgoat Systems cabling/racking assemblies, Vertiv UPS Systems, and our NetDiverse Installation, Configuration Support and Operational Management.

NetDiverse is a reseller and partner of all top-rated networking companies. Within our years of experience selling, managing, and servicing networking products across manufacturers, Cisco-Meraki has proven to exceed the reliability, manageability, and quality standards we set for our clients.

#### NetDiverse offers Service and Support you can rely upon.

NetDiverse's WiFi and Networking expertise is recognized by our client recommendations. Our service earned the Utah Education and Telehealth Network State Master Contract Award with the highest combined score for Wi-Fi and switching network solutions. In addition to being E-Rate experts and providing outstanding customer service, we deliver Enterprise grade Internet, Voice, and other Networking Services nationwide.

This document contains the following sections:

Introduction Letter

• This letter which provides you some general information about NetDiverse, our experience and philosophy.

#### Project Summary

- Total costs and E-Rate eligibility for each applicable Service Type including: Internal Connections, Basic Maintenance of Internal Connections (BMIC), and Managed Internal Broadband Services (MIBS).
- O Total Project Costs compared to remaining E-Rate Budget with the estimated FCC and Lakeside Union Sch Dist portions.

#### Sales Order Detail

- A detailed listing of the Products and Services included in the solution and grouped by Service Type.
   This section contains most, if not all, of the information required to enter the individual FRN line items in your Form 471 request.
- A few optional products that can be utilized in addition to, or in lieu of, the products provided in the main Products and Services tables. These products are typically shown with zero (0) quantity.
- Terms and Conditions of the Agreement created with the Sales order between NetDiverse and Lakeside Union Sch Dist. (Note, if your Form 470 states that we must follow your local requirements, rules, regulations, conditions, etc... we may ask for your assistance to help us understand and follow those requirements.)
- Signature Page for Execution of the Sales Order. (Please scan and send a copy of the signed sales
  order to erate@netdiverse.com when you've selected NetDiverse as your Service Provider.

#### More about this NetDiverse Solution and E-Rate Competitive Bidding Compliance:

This solution was created by an artificial intelligence system utilizing some of NetDiverse's most popular products and information found on your Form 470 submission. The system primarily utilizes the Products and Services section of your Form 470 submission paired with NetDiverse's flagship set of products to create a solution automatically. Product/Service Function, Quantities requested, and other factors to determine which of our flagship products to offer. Although our bidding system is far from perfect, the level of service and support we can provide for our customers is unparalleled. We ask that you please consider us for your E-Rate project.

We hope our solution allows you to select NetDiverse as your Service Provider when comparing our response to other responses for your Form 470. We'll be happy to make reasonable adjustments to our product/service selections and quantities to align with your network needs and requirements. We recommend making these adjustments prior to filing your Form 471.

Here are a couple of examples showing how our system may not align perfectly with your Form 470 intentions, but may still provide enough information for you to select NetDiverse as your Service Provider:

Example 1: Applicant's Form 470 requests 3 separate line items of 20 quantity for Wireless Access Points. The applicant's intent was to ensure there were enough request items for 20 APs, 20 licenses, and 20 mounting brackets. Our bidding system may interpret this as a request for 60 APs and 60 licenses. If the per unit pricing and solution is in alignment with what you're requesting, we ask that you consider our solution and price based on the per unit price and products we offer. We're able to adjust the quantities and/or specific products to meet your requirements. Just call us on 855-233-3357 to discuss adjustments to our bid.

Create your own documents at CognitoForms.com!

Example 2: Applicant's Form 470 requests Quantity of 200ft of cabling, but the intention was to request 200 units of cable drops. Our bidding system may interpret this request as either 200 patch cables at 1ft each or potentially a 200' fiber optic cable run. Please read the product description carefully as what we offer and what you need may be slightly or significantly different. You may want to consider one of our other products. Feel free to contact us on 855-233-3357 to discuss adjustments and alternatives.

If our solution does not align perfectly with your needs, we're happy to adjust the quantities and/or adjust to specific products to meet your requirements. Just call us on 855-233-3357 to discuss adjustments to our solution.

Please consider this bid in your 2022 Form 470 evaluation. If our proposed solution arrived after your bidding deadline or we did not follow your bidding requirements pursuant to the information provided on your Form 470 or RFP, AND all other Service Providers failing to follow the same bidding deadlines and requirements are disqualified, you may also disqualify our solution without inclusion in your bid evaluation.

If you have any questions or you would like to review our solution with adjusted quantities or adjusted products, before or after you select NetDiverse as your Service Provider, please call us on 855-233-3357 or email erate@netdiverse.com and we'll adjust our order for you.

Cordially,

Gary Nieboer General Manager NetDiverse

# **E-Rate Sales Order Summary of Total Costs (before FCC Discount)**

			Total Price	Total Eligible Portion (Total Ineligible Portion)
Internal Connections Products/Services			\$277,294.21	\$277,294.21 (\$0.00)
Internal Connections Shipping and Handling			\$1,950.00	\$1,950.00 (\$0.00)
Internal Connections Installation, Configuration, and Travel			\$35,083.50	\$35,083.50 (\$0.00)
Internal Connections Sales Tax and Fee Contingency**			\$32,218.59	\$32,218.59 (\$0.00)
Basic Maintenance (BMIC)	\$0.00 per mo <mark>nth</mark>	\$4,872.00 Up Front	\$4,872.00*	\$4,872.00 (\$0.00)
* Total Price for MIBS and BMIC includes the	e Up Front Price pl <mark>us 12 mon</mark>	thly charges for		
July 2022 through June 2023.			Total Order Price	Total Eligible Portion (Total Ineligible Portion)
Total Sales Order			\$351,418.30	\$351,418.30 (\$0.00)

<sup>\*\*</sup>CONTIGENCY FOR SALES TAX OR OTHER FEES is included in this order. A 0.10 contingency fee has been added to this order due to an opinion Sales Tax or other governmental fees may apply to your order. WE WILL ONLY CHARGE TAXES AND FEES BASED ON WHAT IS CHARGED TO US BY GOVERNMENTAL ENTITES. For example, if Sales Tax should be applied to hardware at 8% and to installation services at 2%, but we have the Contingency Fee listed as a conservative 10%, our final invoice will reflect the 8% for hardware and 2% for installation services.

You may contact us on **855-233-3357** or **erate@netdiverse.com** with questions or to make changes to this order.

## E-Rate Sales Order - Estimated FCC and Lakeside Union Sch Dist Portions of the Project

### Warning: The attached Sales Order May Exceed your E-Rate Budget.

(please read the below information carefully)

The attached sales order appears to EXCEED the E-Rate budget for Lakeside Union Sch Dist. This is based on an Estimated Budget for your entity of: \$188,069.78. If you believe this estimate is incorrect, please contact us by calling 855-233-3357 or emailing erate@netdiverse.com.

We will be happy to work with you to move some items from this E-Rate Sales Order to a separate order outside the E-Rate program. This can occur before or after your Form 471 submission. Please contact us to discuss options.

For your convenience, we estimate the FCC and Client portions of the project here:

### **Estimated Price Allocations:**

Total Order Price = \$351,418.30

FCC Portion = \$188,069.78 x 80.00% = \$150,455.82

Client Portion = \$200,962.48



Date	Account	Form 470
2/21/2022	143945	220016168

825 N 300 W Suite C-149

Salt Lake City, UT 84103

855-233-3357

https://netdiverse.com/e-rate-

services/

93311

erate@netdiverse.com

SPIN:

143036067

**Invoice Type:** 

SPI or **BEAR** 

661-716-1840

**E-RATE SALES ORDER** 

Category 2

Estimated FCC 80.00%

Discount Rate:

Applicant/Client Address: Applicant/Client Contact: Lakeside Union Sch Dist Bryanda Ramirez bramirez@infinitycomm.com 14535 Old River Rd, Bakersfield, CA

This version of the Sales Order was emailed to: bramirez@infinitycomm.com,p2bids@infinitycom

You may contact us on 855-233-3357 or erate@netdiverse.com with questions or to make changes to the below order details.

### **Products and Services Details**

Additional product details may be available in the section preceding Additional Terms and Conditions section of this Sales Order, at our website, at the manufacturers' websites, or by contacting NetDiverse on 855-233-3357

### **Service Type: Internal Connections**

Quantity	Make / Model	Product and Service Summary Description (Function**)	Unit Price Unit Ineligible Portion (Eligible %)		Total Line Item Price (Ineligible)	
3	Meraki / MS225-48FP- HW	Meraki MS225-48FP L2 Stck Cld-Mngd 48x GigE 740W PoE Switch	\$6,174.66 (100%)		\$18,523.98	
3	Meraki / LIC-MS225- 48FP-5YR	Meraki MS225-48FP License - 5YR <sub>License</sub>	\$935.45 (100%) \$2,806.34			
18	Meraki / MS225-48FP- HW	Meraki MS225-48FP L2 Stck Cld-Mngd 48x GigE 740W PoE Switch Switching	<b>7227</b> 2 10.00			
18	Meraki / LIC-MS225- 48FP-5YR	Meraki MS225-48FP License - 5YR <sub>License</sub>	\$935.45 (100%) \$16,838.06			
16	Meraki / MS225-48FP- HW	Meraki MS225-48FP L2 Stck Cld-Mngd 48x GigE 740W PoE Switch  Switching	\$6,174.66 (100%)		\$98,794.56	
16	Meraki / LIC-MS225- 48FP-5YR	Meraki MS225-48FP License - 5YR	\$935.45 (100%)		\$14,967.17	
2	Meraki / MS225-48FP- HW	Meraki MS225-48FP L2 Stck Cld-Mngd 48x GigE 740W PoE Switch Switching	\$6,174.66 (100%)		\$12,349.32	
2	Meraki / LIC-MS225- 48FP-5YR	Meraki MS225-48FP License - 5YR <sub>License</sub>	\$935.45 (100%) \$1,870.90			
1	NetDiverse / SHIP-HANDLE	Shipping and Handling	\$1,950.00 (100.0%)		\$1,950.00	
1	NetDiverse / Sales Tax and Fee Contingency	***CONTIGENCY FOR SALES TAX OR OTHER FEES	\$32,218.59 (100.00%)		\$32,218.59	

\*\*\*CONTIGENCY FOR SALES TAX OR OTHER FEES is included in this order. A 0.10 contingency fee has been added to this order due to an opinion Sales Tax or other governmental fees may apply to your order. WE WILL ONLY CHARGE TAXES AND FEES BASED ON WHAT IS CHARGED TO US BY GOVERNMENTAL ENTITES. For example, if Sales Tax should be applied to hardware at 8% and to installation services at 2%, but we have the Contingency Fee listed as a conservative 10%, our final invoice will reflect the 8% for hardware and 2% for installation services.

You may contact us on 855-233-3357 or erate@netdiverse.com with questions regarding Sales Tax and Contingency Fees or to make changes to this order.

### Service Type: Optional Internal Connections items to consider

Quantity	Make / Model	Product and Service Summary Description (Function*)	Unit Price (Eligible %)
0	Meraki / MS225-24P-HW	Meraki MS225-24P L2 Stck Cld-Mngd 24x GigE 370W PoE Switch	\$3,868.03 (100%)
0	Meraki / LIC-MS22 <mark>5-24P-5YR</mark>	Meraki MS225-24FP License -5YR  License	\$584.66 (100%)
0	Meraki / MS125-24P-HW	Meraki MS125-24P 10G L2 Cld-Mngd 24x GigE 370W PoE Switch Switching	\$2,764.40 (100%)
0	Meraki / LIC-MS125-24P-5Y	Meraki MS125-24P Enterprise License and Support, 5 Year  License	\$464.18 (100%)
0	Meraki / MS125-48FP-HW	Meraki MS125-48FP 10G L2 Cld-Mngd 48x GigE 740W PoE Switch Switching	\$4,811.98 (100%)
0	Meraki / LIC-MS125-48FP-5Y	Meraki MS125-48FP Enterprise License and Support, 5 Year  License	\$807.89 (100%)
0	Meraki / MS225-24P-HW	Meraki MS225-24P L2 Stck Cld-Mngd 24x GigE 370W PoE Switch Switching	\$3,868.03 (100%)
0	Meraki / LIC-MS225-24P-5YR	Meraki MS225-24FP License -5YR  License	\$584.66 (100%)
0	Meraki / MS125-24P-HW	Meraki MS125-24P 10G L2 Cld-Mngd 24x GigE 370W PoE Switch Switching	\$2,764.40 (100%)

<sup>\*\*</sup>Service Function shown is typical but may vary depending on Applicant's actual use of the Product or Service. Entry in your Form 471 should reflect Applicant's actual use.

0	Meraki / LIC-MS125-24P-5Y	Meraki MS125-24P Enterprise License and Support, 5 Year	\$464.18 (100%)
0	Meraki / MS125-48FP-HW	Meraki MS125-48FP 10G L2 Cld-Mngd 48x GigE 740W PoE Switch Switching	\$4,811.98 (100%)
0	Meraki / LIC-MS125-48FP-5Y	Meraki MS12 <mark>5-48FP Enterpri</mark> se License and Support, 5 Year	\$807.89 (100%)
0	Meraki / MS225-24P-HW	Meraki MS225-24P L2 Stck Cld-Mngd 24x GigE 370W PoE Switch Switching	\$3,868.03 (100%)
0	Meraki / LIC-MS225-24P-5YR	Meraki MS225-24FP License -5YR  License	\$584.66 (100%)
0	Meraki / MS12 <mark>5-24P-HW</mark>	Meraki MS125-24P 10G L2 Cld-Mngd 24x GigE 370W PoE Switch Switching	\$2,764.40 (100%)
0	Meraki / LIC-MS125-24P-5Y	Meraki MS125-24P Enterprise License and Support, 5 Year  License	\$464.18 (100%)
0	Meraki / MS125-48FP-HW	Meraki MS125-48FP 10G L2 Cld-Mngd 48x GigE 740W PoE Switch Switching	\$4,811.98 (100%)
0	Meraki / LIC-MS125-48FP-5Y	Meraki MS125-48FP Enterprise License and Support, 5 Year  License	\$807.89 (100%)
0	Meraki / MS225-24P-HW	Meraki MS225-24P L2 Stck Cld-Mngd 24x GigE 370W PoE Switch Switching	\$3,868.03 (100%)
0	Meraki / LIC-MS225-24P-5YR	Meraki MS225-24FP License -5YR  License	\$584.66 (100%)
0	Meraki / MS125-24P-HW	Meraki MS1 <mark>25-24P 10G L2 Cld-Mngd 24x GigE 370W PoE Switch  Switching</mark>	\$2,764.40 (100%)

0	Meraki / LIC-MS125-24P-5Y	Meraki MS125-24P Enterprise License and Support, 5 Year  License	\$464.18 (100%)
0	Meraki / MS125-48FP-HW	Meraki MS125-48FP 10G L2 Cld-Mngd 48x GigE 740W PoE Switch Switching	\$4,811.98 (100%)
0	Meraki / LIC-MS125-48FP-5Y	Meraki MS12 <mark>5-48FP Enterpri</mark> se License and Support, 5 Year	\$807.89 (100%)

### Internal Connections: Installation, Configuration, and Travel

Quantity	Make /	Product / Service	Unit Price	Total Line Item	Estimated	Estimated Client
	Model	Summary Description		Price	FCC Portion	Portion
		Ineligible in Orange	(Eligible %)	(Ineligible)		
117.00	NetDiverse /	E-Rate Eligible Installation	\$172.50	\$20,182.50		
	INST-LAB	Labor Hours	(100%)			
1	NetDiverse /	E-Rate Eligible Travel and	\$6,669.00	\$6,669.00		

	TRAV <mark>EL</mark>	Per Diem Costs	(100%)			
						_
98	NetDiverse /	E-Rate Eligible Remote	\$84.00	\$8,232.00		
	REM-CON	Config Labor Hou <mark>rs</mark>	(100%)			

### **Service Type: Basic Maintenance of Internal Connections**

Quantity	Make / Model	Product and Service Summary Description (Function*)	Unit One-Time Price (Eligible %)	Unit <i>Ineligible</i> Portion	Total Line Item Price (Ineligible)	
58	NetDiverse /	Basic Maintenance - Hourly	\$84.00		\$ <mark>4,</mark> 872.00	
	TEL-TECH-	Fee for NetDiverse Remote	(100%)			
	SUPPORT	Technical Support - Invoiced				
		as support occurs				
		BMIC Basic Tech Support				

<sup>\*\*</sup>Service Function shown is typical but may vary depending on Applicant's actual use of the Product or Service. Entry in your Form 471 should reflect Applicant's actual use.

### **Additional Product Details:**

Some of the products and services listed above have additional information in their product descriptions. For the products that apply, the basic description and additional description are shown here:

<sup>\*\*\*</sup> Each BMIC line item above either has a manufacturer's license which is charged "one time" for the license term OR Technical Support which is invoiced hourly as the service occurs, which is also "one time" and not monthly. When filing your Form 471, please utilize the "One-Time Costs" section for all BMIC entries.

BMIC: **NetDiverse / TEL-TECH-SUPPORT:** Basic Maintenance - Hourly Fee for NetDiverse Remote Technical Support - Invoiced as support occurs: **Additional Information:** Remote Technical Support provided by telephone, email ticketing, or chat for the Maintenance for Troubleshooting, Configuration, Firmware updates, and basic support of Applicant's Network. This Basic Maintenance Service is invoiced hourly for time spent by NetDiverse or it's contractors when providing technical support or assistance for E-Rate Eligible Products and Services. If Technical Support is provided for hardware and services that are not 100% E-Rate Eligible, the ineligible portion will be invoiced outside E-Rate allowing this service item to be 100% E-Rate Eligible. This service is not a license, software, warranty, etc... it is for ad hoc Technical Support activities only. Each Quantity listed and/or invoiced is for 1 hour of remote technician assistance. This is not a monthly service.

### Additional Terms and Conditions Specific to this Sales Order:

NetDiverse and its affiliates\* provide Networking, Installation, Configuration, and Management solutions to over 150 School Districts and Libraries nationwide. These services are available almost anywhere in the "lower 48" states.

\*NetDiverse, Frugal Telecom (aka Bridger Partners), and Frubu (aka Tamarack Networks and E-Rate Gear) are all affiliated companies (similar or related ownership.) These companies operate separately due to vendor agreements. We share this information with you for full transparency of who we are. You may receive one or more unique solutions from each of these companies in response to your Form 470 request.

Installation and Configuration assistance may be decoupled from most NetDiverse E-Rate solutions. Many of our clients have the skills and time required to perform the physical installation of our products themselves, but they require Remote Configuration assistance from our team. To select or de-select Installation and/or Configuration, please contact us by calling 855-233-3357 or emailing erate@netdiverse.com.

NetDiverse follows and complies with FCC Lowest Corresponding Price Rules.

By signing this order, Client retains the right, for 5 full E-Rate funding years, to purchase ANY E-Rate Eligible NetDiverse Products and Services pursuant to the then current NetDiverse pricing which complies with E-Rate's Lowest Corresponding Price (LCP) rule.

The pricing for bundles and components specifically outlined on this order are valid until September 30, 2023, but client may purchase pursuant to our current pricing per the above term as well.

NetDiverse will not place service orders without approval from client to process this order. The project is considered approved when any of the following occur:

- 1. USAC/FCC approve funding for the project and approves Client's Form 486 filing for the Funding Request.
- 2. Client provides approval by email or fax.
- 3. Client provides approval by sending a Purchase Order aligned with the Terms and Conditions of this order to NetDiverse

NetDiverse may not order equipment or schedule installation prior to payment receipt. This is equal to the "Client Portion" under SPI invoicing and the full value of the Order under BEAR invoicing.

Some preliminary engineering and planning may begin under NetDiverse's sole option prior to payment and funding by Client/FCC. Shipment, scheduling, and installation will only begin once the client portion of the payment for products and services is received by NetDiverse, funding for this order is approved by USAC/FCC, and client's Form 486 is approved by USAC/FCC.

Pricing only includes installation and configuration if specifically indicated in the sales order. Configuration services are performed remotely by NetDiverse. Installation services may include time for project management, engineering, planning, and on-site physical installation of equipment. The total Installation and/or Configuration time allocated per this and/or subsequent Sales Orders will be performed by NetDiverse or its subcontractors. If additional time is required to complete an installation, which is rare, NetDiverse will inform Client of this as soon as practical and provide estimates and pricing for the additional required labor.

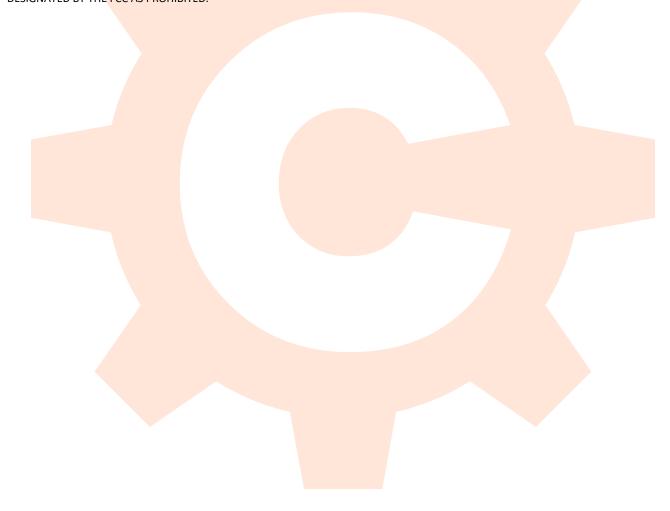
If labor for installation of cabling or hardware is include in the Sales Order, this is an estimate of the quantity of labor hours to be performed. If fewer hours of labor are performed than outlined on this and/or subsequent Sales Orders, then the actual amount of hours performed will be invoiced to the customer and FCC.

NetDiverse has updated and will update it's SPAC prior to the E-Rate Form 471 Application Deadline each year.

Customer and NetDiverse further agree to file necessary paperwork in a timely fashion with the School and Libraries Division of the Universal Service Fund to ensure timely reimbursements to either the School or NetDiverse depending on the invoicing method.

Unless stated otherwise, Funding Approval for Licenses are typically requested under the Category 2 Service Type of "Internal Connections" and are required for reasonable performance of the equipment in a network environment. Some clients and USAC reviewers may find a license better fits a Basic Maintenance Service Type. Although we believe licenses are typically "Internal Connections" the actual selection should be made based upon the primary purpose of the license in the Applicant's opinion.

NetDiverse DOES NOT UTILIZE ANY PRODUCTS OR COMPONENTS FROM HUAWEI, ZTE, OR ANY OTHER "COVERED COMPANY" DESIGNATED BY THE FCC AS PROHIBITED.



### Sales Order Agreement

This sales order is an Agreement between the following Parties:

NetDiverse, LLC, (hereafter, "NetDiverse, LLC", "NetDiverse", "Company", "Service Provider", "we", "us"), a Montana Limited Liability Company, with offices located at 825 N 300 W, Suite C-149, Salt Lake City, UT 84103; AND

Lakeside Union Sch Dist, (hereafter, "Lakeside Union Sch Dist", "Client", "Customer", "Applicant", "you", etc...) an Applicant as defined under the FCC/USAC Schools and Libraries Program with a Billed Entity Number of: 143945

This Sales Order, "Sales Order Terms, Conditions, and Definitions" in conjunction with the "NetDiverse Terms and Conditions" and "NetDiverse E-Rate Terms and Conditions" as found on the NetDiverse website <a href="https://netdiverse.com/e-rate-services/">https://netdiverse.com/e-rate-services/</a> ("Agreement") shall govern the relationship of the Parties with respect to the purchase of items listed on this Sales Order or any subsequent purchases.

UPLOADING THIS AGREEMENT TO USAC FOR FUNDING PURPOSES, WITH OR WITHOUT APPLICANT SIGNATURE, IS EXECUTION OF THIS AGREEMENT BY APPLICANT AND ACCEPTANCE OF ALL NetDiverse TERMS & CONDITIONS IN THIS SALES ORDER AND ON THE NetDiverse WEBSITE. IF EDITS ARE MADE TO THIS DOCUMENT OTHER THAN APPLICANT SIGNATURE ROWS FOUND IMMEDIATELY BELOW, THE DOCUMENT WILL BE CONSIDERED INVALID AND NOT EXECUTED.

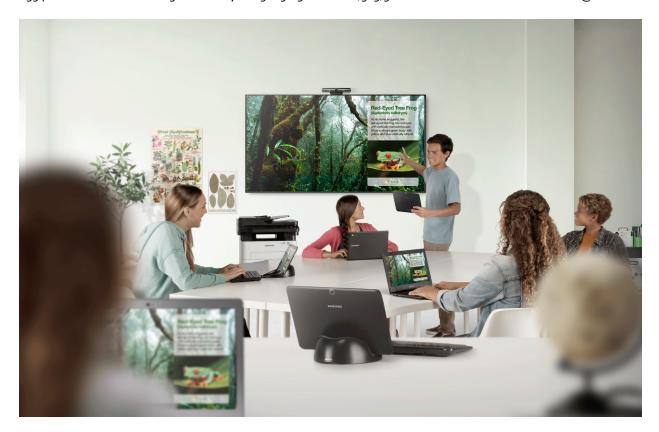
NetDiverse	Lakeside Union Sch Dist
Luft 1	
Signature	Applicant Signature
Gary Nieboer	
Name	Name
General Manager	
Title	Title
2/21/2022	
Date	Date





Modern IT Solutions to Help Your Business Succeed

2554 Lincoln Boulevard #232 • Venice, CA 90291-5082 • 800/325/9868 • www.bccs.com • Email info@bccs.com



Lakeside Union School District
Response for
Category Two
E-Rate Funding Year 2022

Form 470 Application Number: 220016168 February 23, 2022





### Modern IT Solutions to Help Your Business Succeed

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### **TIP: Document Tips**

Blue Chip has added some Tips to help you follow this document. Additionally, highlighted areas are indicated by a red outline. This makes locating relevant information easier.

1 Highlighted Information

### **Table of Highlighted Information**

1 Highlighted Information ......ii





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February 23, 2022

Bryanda Ramirez Lakeside Union School District 14535 Old River Road Bakersfield, CA 93311

Dear Bryanda,

Blue Chip Computer Systems (SPIN is 143048876), is delighted to submit pricing and a solution to Lakeside Union School District in response to your Form 470 number 220016168. We have been in business for 39 years, proudly providing educational institutions the best in Digital Learning and delivering E-Rate solutions for a decade.

We are responding to the Category Two Service Requests. The term of this contract shall commence on April 1, 2022. The contract may be subject to the Customer receiving E-Rate funding in the form of a funding commitment decision letter in the amount requested. We will make every effort to deliver the system by September 30, 2022 though we cannot guarantee the date due to supply chain shortages.

We have partnered with Juniper Networks to deliver an integrated solution that enables seamless access to the network for all the district's users and devices. Juniper is a complete portfolio of enterprise-grade network and security infrastructure and an Al-driven wired and wireless solution to ensure the best possible user experience. We have surpassed all the requirements and in addition to the 5-year usage and support licenses, have included centralized management of devices. Blue Chip has provided equipment that is 100% compliant with the RFP and is also 100% E-Rate eligible. Installation is included for entire project, and we have included BMIC for the first year. Though the BMIC is on the Form 21 I believe that will do for the optics and licenses. If you want us to break that down further, we can update the Form 21.

#### **VENDOR HIGHLIGHTS**

- Gartner Names Juniper a Leader in the 2020 Magic Quadrant for Wired and Wireless LAN Access Infrastructure
- Juniper powers 60+% of the world¹s Internet transactions
- 80% of smart phone traffic runs across Juniper routers and switches
- The California K12 High Speed Network (K12HSN) is currently being upgraded to Juniper
- Mist Al provides network and user visibility for quicker resolution
- No other network vendor can match the reliability, flexibility, scale, and ease of management
- Juniper and Mist improve the user experience and time to resolve end-user and device issues

Please review the attached response we have prepared for you. My direct line is (310) 981-4455 should you have any questions. You may also email me at <a href="mailto:ron@bccs.com">ron@bccs.com</a>. I will personally be managing this project.

I believe we have the experience, partnerships and dedicated service level to help deliver the best solution to you.

Thank you for allowing us the opportunity to be a part of your institution's future success.

Sincerely;

Ron Herman President

Blue Chip Computer Systems

### **Executive Summary**

Blue Chip is pleased to submit this E-Rate proposal to Lakeside Union School District. Our Service Provider Identification Number (SPIN) is 143048876.

Upon reviewing your request, our technical team worked closely with our technology partners to develop the following proposal. Blue Chip provides enterprise class security and networks that enable students to learn. We deliver a comprehensive scalable solution to the classroom that fit the rigorous demands of educational institutions. These networks are an extension of the carrier's network that will deliver the growing network speeds for students today and meet future requirements. Blue Chip hopes this solution meets or exceeds the IT needs of Lakeside Union School District.

To achieve a truly effective solution, Blue Chip will (together with you), take the necessary steps to thoroughly understand the existing systems and any future demands that might reasonably be placed on those systems. Using accepted planning techniques, we arrived at an optimal solution for today that can grow and evolve as your needs change.

Our Company President, Ron Herman, has served as a technology advisor to schools like Platt College, currently serves on the Santa Monica College's 'Career Services Center Advisory Board' and served on the Mayor's 'Special Advisory Committee on Technology Implementation'.

Ron will personally manage the installation project if Lakeside Union School District chooses Blue Chip Computer Systems and Juniper. He is a Mist certified engineer and has over 40 years in project management.

Senior Engineer, Calvin Contreras - formerly at AT&T, is experienced and skilled in Juniper networking and Mist Wi-Fi, that he has deployed at other schools and companies. He is likewise experienced with Cisco Wi-Fi, Xirus Wi-Fi, Cambium Networks, FortiGate, SonicWall and Extreme/Aerohive networks.

Blue Chip has been in business since 1982. Network Design, Virtualization, Voice and Data Plans, Training, Managed Services, and Network Security are some of the areas of our specialization. Developing solutions based on your company's requirements is our specialty. We have the experience in delivering quality E-Rate solutions to schools just like yours.

We are a company dedicated to ensuring your school receives the highest return on your technology investment.



### Exhibit A - Category Two Service Request - Includes Installation



2554 Lincoln Boulevard #232 Venice, CA 90291-5082 www.bccs.com

SPIN NO: 143048876 CMAS NO: 3-20-70-3218B

### QUOTE

Quote Number: 3761

**Date:** 02/22/2022 03:34pm

Sales Person: bryan
Valid Until: 03/22/2022

BILL TO:	SHIP TO:
Lakeside Elementary School	Lakeside Elementary School
14535 OLD RIVER RD	14535 Old River Rd
Bakersfield, CA 93311	Bakersfield, CA 93311

QTY	Product	Description	List	Sale	Total
8	B-EX230048P-5M2-E	EX2300-48P eRate bundle with 5YR license, support, software updates, Mist wired assurance and VNA	6,869.00	2,541.53	20,332.24
2	B-EX230024P-5M2-E	EX2300-24P eRate bundle with 5YR license, support, software updates, Mist wired assurance and VNA	4,173.00	1,544.01	3,088.02
1	EX4400-48F	12x10G 36x1G fiber switch w/ 4x25G 2x100G uplink/stacking ports. MACsec AES256	18,311.00	6,591.96	6,591.96
1	S-EX-A-C3-5-ND	SW, EX, Advanced, Class 3 (32 or 48 ports), includes Wired Assurance and VNA subscription for EX32 or EX48 Port Switches with SVC NEXT DAY support, 5 YEAR	2,767.00	1,411.17	1,411.17
1	JPSU-550-C-AC-AFO	550W compact AC AFO power supply for EX4400 switches	794.00	277.90	277.90
1	CBL-EX-PWR-C13-US	Power Cable, US	65.00	22.75	22.75
17	SFP-1G-SX-C	SFP, 1G, FDDI 220m and OM1 275m/OM2 MMF 550m, Extended Temperature (-10 through 85 DegC), Duplex LC connector	194.00	67.90	1,154.30
2	SFPP-10G-LR-C	SFP+, 10G-LR Transceiver	1,080.00	313.20	626.40
1	EX-SFP-10GE-DAC- 1M	SFP+ 10 Gigabit Ethernet Direct Attach Copper (twinax copper cable) 1m	184.00	53.36	53.36
	•			Subtotal	33,558.10

	Installation and Configuration					
QTY	QTY Product Description List					
Installation and Configu	Installation and Configuration of equipment in this quote 7,545.92				7,545.92	
Basic Maintenance of Ir	Basic Maintenance of Internal Connections 9,600.00				9,600.00	
	<u>'</u>				17,145.92	

Total	50,704.02
Tax	2,768.20
Shipping	0.00
Grand Total	53,472.22

**ASSUMPTIONS:** This quote estimate applies only to the product or job and duties described above. This estimate may not include taxes, shipping, additional materials or labor that may be required due to unforeseen problems that arise once the job has begun. Changes to this job must be agreed upon in writing before the job progress may continue. Blue Chip will complete this job according to industry standards, or higher. Any materials or equipment for this job will continue to be the property of Blue Chip until the total cost of this job has been paid. Blue Chip may require a deposit before the start of this job or the order is placed of which the remainder will be due upon completion, or any other payment terms agreed upon under separate cover.

Agreed and Accepted:	Date:	
Page 1		02/24/2023







2554 Lincoln Boulevard #232 Venice, CA 90291-5082 www.bccs.com

SPIN NO: 143048876 CMAS NO: 3-20-70-3218B

### QUOTE

Quote Number: 3760

**Date:** 02/22/2022 03:30pm

Sales Person: bryan
Valid Until: 03/22/2022

SHIP TO:
Donald E. Suburu Elementary School 7315 Harris Rd Bakersfield, CA 93313

QTY	Product	Description	List	Sale	Total
10	B-EX230048P-5M2-E	EX2300-48P eRate bundle with 5YR license, support, software updates, Mist wired assurance and VNA	6,869.00	2,541.53	25,415.30
2	EX2300-VC	EX2300 Virtual Chassis License	895.00	331.15	662.30
1	EX4400-48F	12x10G 36x1G fiber switch w/ 4x25G 2x100G uplink/stacking ports. MACsec AES256	18,311.00	6,591.96	6,591.96
1	S-EX-A-C3-5-ND	SW, EX, Advanced, Class 3 (32 or 48 ports), includes Wired Assurance and VNA subscription for EX32 or EX48 Port Switches with SVC NEXT DAY support, 5 YEAR	2,767.00	1,411.17	1,411.17
1	JPSU-550-C-AC-AFO	550W compact AC AFO power supply for EX4400 switches	794.00	277.90	277.90
1	CBL-EX-PWR-C13-US	Power Cable, US	65.00	22.75	22.75
1	SFP-1G-LX-C	SFP, 1G, SMF 10km and MMF 550m, Extended Temperature (-5 through 70 DegC), Duplex LC connector	303.00	106.05	106.05
16	SFP-1G-SX-C	SFP, 1G, FDDI 220m and OM1 275m/OM2 MMF 550m, Extended Temperature (-10 through 85 DegC), Duplex LC connector	194.00	67.90	1,086.40
3	EX-SFP-10GE-DAC- 1M	SFP+ 10 Gigabit Ethernet Direct Attach Copper (twinax copper cable) 1m	184.00	53.36	160.08
				Subtotal	35,733.91

QTY Product Description List Sale Total						
Installation and Configuration of equipment in this quote 8,155.72					8,155.72	
Basic Maintenance of I	asic Maintenance of Internal Connections 9,600.00					

Total	53,489.63
Tax	2,893.42
Shipping	0.00
Grand Total	56.383.05

**ASSUMPTIONS:** This quote estimate applies only to the product or job and duties described above. This estimate may not include taxes, shipping, additional materials or labor that may be required due to unforeseen problems that arise once the job has begun. Changes to this job must be agreed upon in writing before the job progress may continue. Blue Chip will complete this job according to industry standards, or higher. Any materials or equipment for this job will continue to be the property of Blue Chip until the total cost of this job has been paid. Blue Chip may require a deposit before the start of this job or the order is placed of which the remainder will be due upon completion, or any other payment terms agreed upon under separate cover.

Agreed and Accepted: _	Date:	
Page 1		02/24/2022





### Exhibit B - Proposal Response

#### 01 - PROPOSAL FORM

PROJECT: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

OWNER: LAKESIDE UNION SCHOOL DISTRICT

Pursuant to Request For Proposal (RFP) and related documents, the undersigned bidder, having familiarized himself/herself with the terms of the contract, the local conditions affecting the performance of the contract, the cost of the work at the location where the work will be performed, and the Contract Documents, proposes and agrees to perform, within the time stipulated, including all of its component parts, and everything required to be performed, and to provide and furnish any and all of the labor, materials, tools, expendable equipment, and all applicable taxes, utility and transportation services necessary to perform the contract and complete in a workmanlike manner all of the work required in connection with 0023-22C.1 -0023-22C.1 Lakeside Union School District Network Electronics all in strict conformity with the Specifications, and other Contract Documents, including Addendum No.'s 1 Copies of Addenda are obtainable from the Owner's Representative (Infinity Communications and Consulting, Inc.).

#### BASE BID – 0023-22C.1 Lakeside Union School District Network Electronics

The Bidder agrees to perform all work noted above, as described in the RFP and Project Documents for the lump sum of:

One hundred and nine thousand, eight hundred and fifty-five dollars and twenty seven cents

109,855.27 Dollars (\$

(Amount Shall Be Shown in Both Words and Figures. In Case of a Discrepancy, The Amount Shown In Words Will Govern).

Bidder shall breakout the above Base Bid cost by Site for E-Rate Program funding allocation purposes:

Project will be awarded based on the evaluation criteria set forth herein. Price will be evaluated based on the sum total of the Base Bid, Basic Maintenance, and all Additive Alternates.

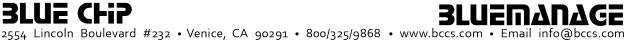
The bidder agrees that upon receipt of Owner's "Notice to Proceed", he/she will provide all required documents within ten (10) calendar days after the documents are presented for execution.

The bidder has carefully examined the RFP documents and specifications for this project that were prepared and furnished by the OWNER and acknowledges their sufficiency.

It is understood and agreed that the work under the contract shall be commenced by the bidder, if awarded the contract, on the date to be stated in the OWNER'S Notice to Proceed.

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NAME OF BIDDER:	Ron Herman		
FULL NAME OF ALL PARTNERS OR LEGAL NAME			
OF CORPORATION	Blue Chip Computer Systems		
or com cromon	(TYPE OR PRINT)		
AUTHORIZED CONTACT / E REPRESENTATIVE:	ID PREPARER / SALES Ron Herr	man	
BUSINESS ADDRESS:	2554 Lincoln Blvd. #232, Venice,	CA 90291	
	(TYPE OR PRINT)		
TELEPHONE: 800-325-9	868 ext. 105	EMAIL: ron@bccs.com	m
DV: (1) 1/2		Ron Herman, Presiden	nt .
BY: (Signature in ink)	na	(TYPE OR PRINT NAME OF TIT	
"I declare, under penalty of p declaration was executed on <u>l</u>			this bid are true and current and that thi _, California."
PRESIDENT OF CORPORATION:	Ru Herner		February 23, 2022
(	SIGNATURE IN INK)		DATE
F	Ron Herman		
(	TYPE OR PRINT NAME AND TITLE OF SIGNATU	JRE)	
SECRETARY OF	D 1/2		
CORPORATION:	Daniel Herry		February 23, 2022
	Signature In Ink)		DATE
	Ron Herman	1	
(	TYPE OR PRINT NAME AND TITLE OF SIGNATU	IRE)	
CALIFORNIA	STATE		
CONTRACTOR'S LICENSE N		tworks for FEDERAL I.D. NO:	95-3930281
LICENSE EXPIRATION DATE	38 years and does not have a co		
LICENSE EXPIRATION DATE	license. We do not see any reasonable quired for this installation.	on it is re-	
TYPE OF LICENSE:	-		
PUBLIC WORKS CONTRA REGISTRATION NO:	CTOR'S	_	
LICENSE IN THE NAME OF:			
	(TYPE OR PRINT NAME)		
	CORPORATE	SEAL:	
	(IF APPLICABLE		

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### 03 - ELECTRONIC ITEM 21 ATTACHMENT SHEET

Bidder shall provide itemized pricing for all equipment to be included in this Bid Response.

Due to filing requirements, an electronic copy will be required at the time of bid.

Acceptable formats: thumb drive, and digital copy. Files will be returned in the same format as the published Item 21, no exceptions. Failing to comply with these requirements will be considered for bid dismissal.

Bidder shall include a Description, Part Number, Quantity and Price for each relevant item included in their bid. Bidder shall provide the Labor cost as a line item.

Provided by the "Service Provider"

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### 04 - SUBSTITUTION LISTING

PROJECT: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

TO: Lakeside Union School District ("OWNER")

 Pursuant to bidding and contract requirements for the work titled: Project: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

The contract sum, proposed by the undersigned on the Proposal Form, is for the work as described in the Request for Proposal, and otherwise defined in the Contract Documents. However, the undersigned proposes the following substitutions, which were not Pre-Approved prior to the bid date, for the Owner's consideration. All substitutions must be listed on this form and submitted with the bid or they will not be reviewed.

2.	Complete, attaching additional sheets as necessary:		
	Bidder proposes [check one]:	x no substitutions. the following substitutions:	

Specified Product or Material	Proposed Substitution
<u> </u>	

- 3. All bids should be calculated and submitted on the assumption that substitution requests will not be approved.
- 4. Bidder hereby certifies that the requested substitutions are equal or better in all respects to what is specified, unless otherwise noted. Bidder will supply all documentation to support this claim as attachments to the Substitution Listing with their bid. Failure to provide adequate documentation may result in the disqualification of the bid response.

SIGNATURE MUST BE IDENTICAL TO THAT PROVIDED ON BID FORM

BIDDER: Herman

BY: Ron Herman

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### <u>06 - NONCOLLUSION AFFIDAVIT</u>

PROJECT:		N SCHOOL DISTRICT NETWORK ELECTRONICS
OWNER:	LAKESIDE UNION SCHOOL DISTRICT	No. of
	(Public Contract	Code Section 7106)
State of Califor	nia ) ) s	
County Of L	os Angeles	
Dealle		
Ron Herman Blue Chip Comput		orn, deposes and says that he or she is President of coordinate or on behalf of, an
the bidder has no colluded, conspire the bidder has not of the bidder or an advantage agains bid are true; and, f thereof, or divulge	t directly or indirectly induced or solicited any oth id, connived, or agreed with any bidder or anyone in any manner, directly or indirectly, sought by ag yo other bidder, or to fix any overhead, profit or cos t the public body awarding the contract of anyone urther, that the bidder has not, directly or indirectly	on, or corporation; that the bid is genuine and not collusive or sham, the er bidder to put in a false or sham bid, and has not directly or indirectly else to put in a sham bid, or that anyone shall refrain from bidding; the greement, communication, or conference with anyone to fix the bid price at element of the bid price, or of that of any other bidder, or to secure an interested in the proposed contract; that all statements contained in the submitted his or her bid price or any breakdown thereof, or the content and will not pay, any fee to any corporation, partnership, company t thereof to effectuate a collusive or sham bid.
	, -	(SIGNATURE/OF BIDDER)
	NOTARY FOR NONC	COLLUSION AFFIDAVIT
•	No IART FOR NORCE	OCCUSION ALTIDATI
	ned and sworn to (or affirmed) before me this day sublic or other officer completing this te verifies only the identity of the hosigned the document to which this sattached, and not the truthfulness, Y., gr. veligity of that document.	See Calif Jurat Below (SIGNATURE OF NOTARY) Robert P. Wheaton (TYPED NAME OF NOTARY)
docume	y public or other officer completing this certified only the Identity of the Individual who signed to which this certificate is attached, and not the iness, accuracy, or validity of that document.  California, County of _OS Angeles	
by proved to	ped and sworn to (or affirmed) before me  22 day of Felovury, 20 22  Roy Herman  o me on the basis of satisfactory evidence  persons with appeared before me.	ROBERT P. WHEATON COMM. #2265447 Notary Public - California Los Angeles County
Signature		My Comm Expires Nov. 29, 2022

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### 09 - BIDDER'S QUALIFICATION FORM

0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS OWNER: LAKESIDE UNION SCHOOL DISTRICT

The prospective Bidder shall furnish all the following information accurately and completely. Failure to comply with this requirement fully and completely may result in rejection of any bid submitted. Additional sheets may be attached if necessary. "You" or "your" as used in this questionnaire refers to the Bidder's firm and any of its owners, officers, directors, shareholders, parties, or principals. Owner has discretion to request additional information depending on the project.

1.	Firm name and address:	Blue Chip Computer Systems 2554 Lincoln Blvd. #232 Venice CA, 90291	- -
2.	Telephone:	800-325-9868	
3.	Type of firm: (check one) Individ	dual Partnership Corp. X	
4.	Names and titles of all principals	of the firm:	
	Ron Herman	President	
	Ron Herman	VP	
	Ron Herman	Secretary	
5.			on and only the years with the current entity in its on company and have been in business for 38 Years
6.	Years of experience your firm ha	s in public school construction work:	
		We are a Compu	iter Company and have been involved with
	As prime contractor: 38 A	s subcontractor: Schools and Citie	es for 25 years
7.		principals' associations outside of the firm bid	as to cause a loss to a surety? Response must dding this Project. If the answer is yes, give date,
	NO		
			•
8.		or any of your principals been assessed ing to principals' associations outside of the firm	liquidated damages for any project? Response n bidding this Project. If yes, explain:
	NO		
			-
			-
	-		5

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PROJECT:



9.	que prin	estions relating	ears have you or any of your principals been in litigation or arbitration or a dispute of any kind on a question or g to a public construction project and/or an E-Rate project? Response must include information pertaining to ation outside of the firm bidding this Project. If yes, provide name of public agency and details of the dispute. pages, as necessary.
	NO	0	
10.	per	taining to prir	ears have you or any of your principals ever failed to complete a project? Response must include information nicipals' association outside of the firm bidding this Project. If yes, provide owner's name and details. Attach as necessary.
	NO	)	
11.	Exp	perience	
	a.		total number of the specified Systems that you have installed (not using subcontractors) in the last 3 years. (The tractor will be responsible to provide a complete list of reference to confirm this number if asked)
	9		
	b.		e the number of the specified Systems that you have installed (not using subcontractors) in the Education K-12 e last 3 years. (The winning Contractor will be responsible to provide a complete list of reference to confirm this sked)
	3		
12.	Ser	vice	
	a.	Provide the	Address of the Service Facility that will be responsible for service calls for this project:
		Address	830 Commonwealth Ave.
		City	Venice
		State	CA 90291
		Zip	
	b.	Provide the call-ins. (The if asked)	number of Manufacture Certified Technicians that who are employed by you, which are responsible for service ewinning Contractor will be responsible to provide copies of the Manufacture Certificates to confirm this number
		3	
	c.		e the hourly charge that you will charge the Owner for Non-Warranty service calls. Price will include <b>all</b> fees thot limited to travel charges and hourly minimum charges.
		\$175 @ ho	ur and \$150 travel
			PAGE 15 OF 29 Lakeside Union School District Project 0023-22C.1





#### 13. Additional Features

a.	Provide any additional information that you deem as pertinent to this project that will reflect an ROI (Return On Investment) for the specified system that you are proposing to install.
ВІ	ue Chip has installed complete Juniper systems with WAN, LAN and WI-FI
as	ssurance and have seen drastic savings in installation time as well as
ma	aintenance of the network.
b.	Provide any additional information that you deem as pertinent to this project that demonstrates additional functions and features of the specified system that you are proposing to install.
<u>Jur</u>	niper along with Blue Chip provide a better experience to all users.
_	

14. **List of References:** Provide information on the three largest E-Rate projects your company has completed in the last five years that comes closest to matching the scope of this RFP. If Contractor has not completed an E-Rate project, provide the largest three "Educational Market" projects your company has completed in the last five years. Contractor may include additional documentation.

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### Project #1

Project Name: New Los Angeles School Juniper Network

Contact Information:

Address: New Los Angeles Charter School

1919 S. Burnside Avenue

Los Angeles CA 90016

Phone Number: Contact Person:

Name: Xochitl Lira

 Title:
 Director of Operations

 Phone #:
 323-571-7017

Description of Project: Upgraded entire network to Juniper

SRX Firewall, EX3300 switches and
Mist APs. We provide all IT for New
Los Angeles Charter School.

Project Start Date: 01/01/2020

Project Completion Date: 01/31/2020

Contract amount: \$24,797

Architect/Engineer:

Firm Name: Blue Chip Computer Systems

Contact Person:

Name: Ron Herman
Title: President

Phone #: 310-981-4455

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### Project #2

Project Name:	Woodcrest School Network Upgrade

Contact Information:

Woodcrest Schools Address:

6043 Tampa Ave

Tarzana CA 91356 Phone Number: 818-345-3002

Contact Person:

Nate Akiva Name: Director Title: Phone #: 310-210-2814

Upgraded entire network to Juniper Description of Project:

with SRX, EX multi-gig switches and fiber to accommodate new Juniper Mist APs

11/31/2020 Project Start Date:

01/21/2020 Project Completion Date:

Contract amount: \$94,000

Architect/Engineer:

Blue Chip Computer Systems Firm Name:

Contact Person: Ron Herman

Name: President Title: Phone #: 310-981-4455

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### Project #3

Project Name:

Contract amount:

Contact Information: Woodland Hills Private School Address: 22555 Oxnard St. Phone Number: Woodland Hills CA 91367 Contact Person: Serena Koegler Name: COO Title: 818-348-6563 Phone #: Replace outdated network project Description of Project: limited by budget. Juniper SRX, switches and Mist APs to be installed.New fiber runs completed.

Woodland Hills Private School Upgrade

Project Start Date: 12/01/21

Project Completion Date: Ongoing Upgrade project as funds become available

\$1,600 -

Architect/Engineer:
Firm Name: Blue Chip Computer Systems

Contact Person:
Name:
Calvin Contreras

 Title:
 Systems Engineer

 Phone #:
 310-410-0126 ext. 209

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### 10 - MANUFACTURE'S CERTIFCATION FORM

PROJECT: 0023-22C.1 0023-22C.1 LAKESIDE UNION SCHOOL DISTRICT NETWORK ELECTRONICS

OWNER: LAKESIDE UNION SCHOOL DISTRICT

Please provide the following information concerning any Manufacture's Certifications that apply to the material and scope as defined in the Project Specifications and Bid Drawings for the 0023-22C.1 Lakeside Union School District Network Electronics <u>FY2022</u> E-Rate Project for the Lakeside Union School District.

Certification #1 Name of Manufacturer	Juniper JNCIA
Certification Expiration Date	October 15, 2024
Certification #2 Name of Manufacturer	Juniper MIST Master
Certification Expiration Date	November 2023
Certification #4 Name of Manufacturer	
<u>Certification #5</u> Name of Manufacturer	
Please attach a copy(ies) of yo	ur company's Manufacturer's Certification(s).

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### 14 - CONTRACTOR AGREEMENT

THIS AGREEMENT is entered into by and between the Lakeside Union School District, hereinafter called "District", and Blue Chip Computer Systems , hereinafter called "Contractor,". District and Contractor are sometimes individually referred to as "Party" and collectively as "Parties." This Agreement is made with reference to the following facts:

WHEREAS, The District published a Request for Proposal and seeks to procure the work covered in the Agreement in accordance with Public Contract Code 20118.2;

WHEREAS, The Contractor understands that the Agreement is contingent on the District's receipt of federal and/or state funds for the work covered in this Agreement. If the District does not receive adequate federal and/or state funds, this Agreement shall be null and void at the District's request. In the event that the Agreement is rendered void, the District will not be liable for any costs incurred by the Contractor prior to the issuance of a Notice to Proceed; and

NOW, THEREFORE, the Parties, in consideration of the mutual covenants hereinafter set forth, agree as follows:

- Contract Documents. The complete contract includes all of the "Project Documents" provided in the Request for Proposal, including
  all modifications, addenda and amendments thereto. The Contract Documents are complementary and what is called for by
  anyone shall be as binding as if called for by all.
- Scope of Work. The Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, and material necessary to perform
  and complete, in a good workmanlike manner, the work in strict accordance with the Request for Proposal 0023-22C.1 002322C.1 Lakeside Union School District Network Electronics.

It is understood and agreed that the work shall be performed and completed as required in strict accordance to the Contract Documents including, without limitation, the Drawings and Specifications, under the direction and supervision of, and subject to, the approval of the District or its authorized representative.

 Total Contract Price – As full consideration for the faithful performance of the agreement, District shall pay to Contractor, subject to any additions or deductions as provided in the Contract Documents, the sum of:

#### Total sum of Base Bid

	One hundred and nine thousand, eight hundred and fifty-five dollars and twenty seven cents	Dollars (\$	109,855.27
--	--	-------------	------------

CONTRACTOR LEAVE BLANK TO BE FILLED IN BY THE OWNER		_
Total sum of Base Bid		
	Dollars (\$	_

- Work to Commence It is hereby understood and agreed that the wok under this Agreement shall not commence until after the
  issuance of the Notice to Proceed. No work may commence until after <u>April 1</u> of the previous funding year per the requirements
  of the E-Rate Program.
- 3. <u>Time for Completion</u> Project must be completed within ninety (90) consecutive calendar days from the date specified in the District's Notice to Proceed. Agreement may be extended if mutually agreed on by both parties in writing.

Should the Contractor fail to complete this Contract, and the Work provided herein, within the time fixed for completion, due allowance being made for the contingencies provided for herein, the Contractor shall become liable to the District for all loss and damage that the District may suffer on account thereof.

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- 4. <u>Coordination of Work</u> The Contractor shall coordinate its work with the Work of all other contractors. The District shall not be liable for delays resulting from Contractor's failure to coordinate its Work with other contractors in a manner that will allow timely completion of Contractor's Work. Contractor shall be liable for delays to other contractors caused by Contractor's failure to coordinate its Work with the work of other contractors.
- 5. Loss Or Damage The District and its authorized representatives shall not in any way or manner be answerable or suffer loss, damage, expense, or liability for any loss or damage that may happen to the Work, or any part thereof, or in or about the same during its construction and before acceptance, and the Contractor shall assume all liabilities of every kind or nature arising from the Work, either by accident, negligence, theft, vandalism, or any cause whatever; and shall hold the District and its authorized representatives harmless from all liability of every kind and nature arising from accident, negligence, or any cause whatever.
- 6. <u>Payment</u> On or before the twentieth (20th) day of each month, Contractor shall submit to the District an itemized application for payment for Work completed during the prior month. The application shall include all information required by the District and shall be in a format approved by the District.

Contractor may be required to furnish a detailed schedule of values upon request of the District and in such detail and form as the District shall request, showing the quantities, unit prices, overhead, profit, and all other expenses involved in order to provide a basis for determining the amount of progress payments. No progress payments will be made for Work not completed in accordance with this Agreement or for any amounts withheld by the District due to punch list items, disputed work or stop notices, upon final completion

District shall make said payment of any balance due to the Contractor promptly upon filing the Notification of Completion for the Project, receipt of a release of lien and claims from the Contractor pursuant to Civil Code section 3262, and its acceptance of the Work. In the event that the District is required to withhold amounts from payment due to punch list items, disputed work or stop notices, Contractor shall execute a Conditional Waiver and Release upon Final Payment on the form prescribed in Civil Code section 3262 and shall execute an Unconditional Waiver and Release upon Final Payment on the form prescribed in Civil Code Section 3262, upon the District's payment of any amounts originally withheld from payment. Pursuant to California law, should a dispute arise between the Contractor and District, including amounts withheld for punch list items, District may withhold from the payment an amount not to exceed one hundred and fifty percent (150%) of the disputed amount and/or the amount of the punch list work.

The Contractor to comply with the SLD's Form 474 "Service Provider Invoicing" (SPI) method for this contract. Contractor will invoice USAC directly for the committed funding amount of "eligible" equipment and services. The Owner will only be responsible for their percentage of the "eligible" equipment and services and 100% of "ineligible" equipment and services. A copy of the Form 474 will be sent to the Project Administrator, for approval, prior to be sent to USAC.

In the event that the Owner authorizes the Service Provider to begin service prior to filing a Form 486 (Receipt of Service Confirmation Form), the Owner agrees to pay the Service Provider in full for the discounted and undiscounted amount of the accepted service(s) received. The Owner shall, at their sole discretion, seek reimbursement for the discounted amount of the service provided from USAC. The Owner shall do so by preparing and submitting a Form 472 Billed Entity Applicant Reimbursement (BEAR) to USAC. Service Provider agrees to remit any and all reimbursement payments received by the Service Provider as a result of a Form 472 filed by the Owner, within 20 business days after receipt of funds released by USAC.

- 7. Additional Work To the extent that additional work is required for the proper completion of the Work due to unforeseen circumstances and/or site conditions and is, therefore, not set forth in Contract Documents, the Parties may execute a change order to this Agreement setting forth the scope of such additional work, the time for completion for such additional work and the amount of additional compensation.
- 8. <u>Assignment of Contract</u> Neither Party shall not assign, transfer, convey, or otherwise dispose of this Agreement or of his/her right, title of interest in or to the same or any part thereof without previous consent in writing from the other Party's authorized representative.
- Suspension/Termination of Contract If Contractor fails to commence work as provided in the Agreement, or fails to make delivery
  of materials promptly as ordered and such delivery is so late as to amount to gross negligence or willful misconduct, or if in the
  opinion of District's authorized representative, Contractor is not carrying out the provisions of the Agreement in their true intent and

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meaning, written notice will be served on Contractor to provide, within a specified time to be fixed by District's authorized representative, for satisfactory compliance with this Agreement. If Contractor neglects or refuses to comply with such notice within the time therein fixed, he/she shall not thereafter exercise any rights under said Agreement or be entitled to receive any of the benefits thereof, except as hereinafter provided, and District's authorized representative may with the approval of the District Board perform any part of the Project or purchase any or all of the material included in the Agreement or required for the completion thereof, or take possession of all or any part of the machinery, tools, appliances, materials and supplies used in the Project covered by the Agreement or that have been delivered by or on account of Contractor for use in connection therewith, and the same may be used either directly by District or by other parties for it, in the completion of the Project.

District has the right to terminate or abandon any portion or all of the Project under this agreement by giving ten (10) calendar days written notice to Contractor and its Surety. In such event, District shall be immediately given title and possession to all original field notes, drawings and specifications, written reports and other documents produced or developed for that portion of the Project completed and/or being abandoned. District shall pay Contractor the reasonable value of services rendered for any portion of the Project completed prior to termination. If said termination occurs prior to the issuance of the Notice to Proceed, the District shall not be liable to the Contractor for any costs or amounts whatsoever under this Agreement. If said termination occurs prior to completion of any task for the Project for which a payment request has not been received, the charge for services performed during such task shall be the reasonable value of such services, based on an amount mutually agreed to by District and Contractor of the portion of such task completed but not paid prior to said termination. District shall not be liable for any costs other than the charges or portions thereof which are specified herein. Contractor shall not be entitled to payment for unperformed services, and shall not be entitled to damages or compensation for termination of the Project.

Contractor may terminate its obligation to provide further services under this Agreement upon thirty (30) calendar days' written notice to District only in the event of substantial failure by District to perform in accordance with the terms of this agreement through no fault of Contractor.

- 10. Procedure for Resolving Disputes The parties to this Agreement are subject to the provisions of Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3 of the Public Contract Code (as amended by the Statutes of 1990, Chapter 1414, effective January 1, 1991), which requires compliance with the following procedures to resolve any claim by the contractor of \$375,000 or less regarding an extension of time, a change order, extra work, or any other disputed amount: If following the meet and confer conference the claim or any portion remains in dispute, the claimant must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.
- 11. Indemnification To the fullest extent permitted by law, Contractor shall indemnify, defend and hold harmless District against any and all claims involving any type of property damage or personal injury, including death, that may be asserted by any person or type of entity, arising out of or in connection with the performance of work, both on and off the job site; provided however, Contractor shall only be liable to the extent of its negligence or willful misconduct. Contractor will defend any action filed in connection with any of said claims, damages, penalties, obligations or liabilities and will pay all costs and expenses, including attorney fees in connection therewith. Contractor will promptly pay any judgment rendered against Contractor or District arising out of or in connection with such work, operation or activities of Contractor hereunder and Contractor agrees to save and hold District harmless there from. District may retain to the extent it deems necessary, the money due to Contractor under and by virtue of this Agreement until disposition has been made of such actions or claims for damages as specified herein above.
- 12. Interpretation In interpreting this Agreement, it shall be deemed that it was prepared jointly by the Parties with full access to legal counsel of their own. No ambiguity shall be resolved against any party on the premise that it or its attorneys were solely responsible for drafting this Agreement or any provision thereof.
- 13. Governing Law This Agreement shall be construed in accordance with and be governed by the laws of the State of California. The Parties agree that Kern County, California is the proper venue for enforcement of the terms of this Agreement. The prevailing party in any action to enforce this Agreement or otherwise concerning the terms of the settlement of the action shall be awarded costs and attorney's fees.
- 14. Equipment Warranty Contractor shall maintain a guarantee that all items delivered under this Agreement are protected against imperfections of materials and/or workmanship during the period of the Agreement. Within thirty (30) days of completion of the Project, the Contractor shall assign any manufacturers or other equipment warranties to the District and shall provide the District with any relevant document(s) thereto.

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Should the contract warrant an additional term above the already established term.

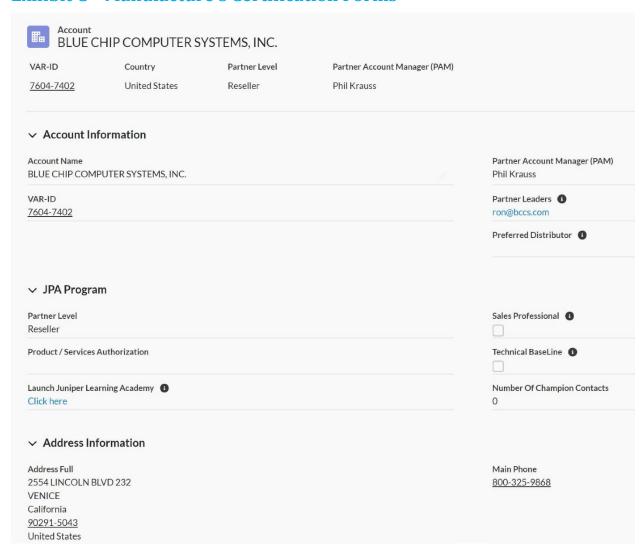
- 1. Integrated Agreement This Agreement embodies the entire understanding between the Parties pertaining to the matters described herein. Each party acknowledges that no party, agent or representative of the other party has made any promise, representation, or warranty, express or implied, not expressly contained in this Agreement, that induced the other party to sign this document. No modification of this Agreement shall be valid unless agreed to in writing by the Parties. This Agreement may be executed in separate counterparts, the whole of which shall constitute a binding agreement. Facsimile or E-mail signatures, when received, shall have the same force and effect as original signatures.
- Contract Expiration This agreement expires on the date listed below. The contract may be extended upon agreement by both parties. Contract Expiration Date: September 30, 2022

**IN WITNESS WHEREOF**, the parties hereto have caused this Amendment to be duly executed and delivered as of the Effective Date set forth in the introductory paragraph above.

"DISTRICT"	"CONT	RACTOR"
Lakeside Union School District	Blue C	Chip Computer Systems
Ву:	Ву:	Ru Herna
Name:	Name:	Ron Herman
Title:	Title:	President
Date:	Date:	Feb 23, 2022

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### **Exhibit C - Manufacture's Certification Forms**





### **CERTIFICATE OF ACHIEVEMENT**

This certifies that

Calvin E Contreras

is recognized as a

Juniper Networks Certified Associate

Junos (JNCIA-Junos)

Friday, October 15, 2021

Rami Rahim

Chief Executive Officer

Pradeep Sindhu

Founder & Chief Scientist

Code: Q91WZL7Q7B1E1C9S Verify at https://www.certmetrics.com/juniper/public/verification.aspx

### Exhibit D - Blue Chip Terms of Sale

#### Contract for services and/or products for E-Rate Year 2022

This agreement is by and between the *Lakeside Union School District* ("The Customer") and *Blue Chip Computer Systems* ("Service Provider") for the purchase of eligible equipment and services as described on the attachment to this letter as part of the E-Rate Year 25 effort. Service Provider was selected based on Service Provider's response to our RFP or on the basis of a qualifying Form 470. We intend to file a Funding Request Form 471 with the Universal Services Administrative Company (USAC), Schools and Libraries Division (SLD) E-Rate Program for eligible equipment and services based upon Service Provider's proposal.

Service Provider agrees to abide by all terms and conditions of the Universal Service Act of 1996 as implemented by the SLD E-Rate Discount Program in the procurement, delivery, invoicing and all other transactions associated with the project. The term of this contract shall commence on July 1, 2022 for Category 1 Services and April 1, 2022 for Category 2 and shall terminate on September 30, 2023 for non-recurring services. This contract can be renewed for two additional terms.

The contract may be subject to the Customer receiving E-Rate funding in the form of a funding commitment decision letter in the amount requested. Prices must be held firm for the duration of the E-Rate Year 22 fiscal year ending September 30, 2023 or until all work associated with the project(s) are complete (including any SLD approved extensions) The work shall be subject to the following conditions:

- A. Service Provider holds a valid Service Provider Identification Number (SPIN) and is not "Red-Light Status" with the FCC.
- B. These services may depend on partial funding from the E-rate program.
- C. The Customer expects Service Provider to make themselves thoroughly familiar with any rules or regulations regarding the E-rate program.
- D. Contract may be contingent upon the specific funding of the FRN at the percentage rate submitted for.
- E. The maximum percentage the Customer will be liable for is the pre-discount amount minus the funded amount as shown on the form 471 Block 5. The Service Provider will be responsible for invoicing the Schools and Libraries Division for the funded amount unless the applicant elects to proceed without receipt of a Funding Commitment Decision letter.
- F. No E-rate billing can take place before July 1, 2022. If Customer elects to take delivery after April 1, 2022 but prior to Receipt of a Funding Commitment Decision letter then Customer is liable for all amounts and agrees to pay progress payments and invoice USAC via the Billed Entity Application for Reimbursement (Form 472)
- G. No installation work can take place before April 1, 2022.
- H. In the event of questions during the E-Rate audit process, Service Provider is expected to reply within 3 days to questions associated with their proposal.
- I. All work is subject to the 100% approval of the project or purchase by the FCC under the E-rate discount program of the Telecommunications Act of 1996 unless otherwise approved by Customer
- J. The Service Provider will be required to send copies of all forms and invoices submitted to SLD prior to invoicing the SLD to the Customer for our records.
- K. Service Provider will be responsible for procuring the discounted amount from the SLD unless Customer elects otherwise.
- L. In addition, Customer reserves the right to fund, or partially fund (proceed with project or purchase) or not to fund regardless of E-rate approval.
- M. It is understood that, subject to state and local law, this contract is for 1 year with 2 voluntary annual renewals (3 years)





- N. Customer agrees to promptly file Form 486 Receipt of Service Confirmation upon receipt of a Funding Commitment Decision Letter.
- O. The contractor will submit all pricing in the Form 471 Item 21 format found at http://www.usac.org/sl/tools/forms/471-templates.aspx
- P. Customer agrees that progress payments based on percentage of completion and partial delivery of equipment are acceptable.

**Lakeside Union School District** (Customer) agrees to pay the contract amount set forth in Exhibit A and B. See Category One and Two Service Requests for the bill of materials.

Service Provider: Blue Chip Computer Systems	Customer: Lakeside Union School District
SPIN: 143048876	
FCC Registration Number (FRN): 0025334780	Billed Entity Number: 143945
Signature: Rue Hernen	Signature:
Printed Name: <u>Ronald Herman</u>	Print Name:
Title: President	Title:
Date: February 23, 2022	Date:

### **Exhibit E - References**

Blue Chip has been satisfying customers since 1982. We deliver communication and network solutions with a greater ROI.

New Los Angeles Charter Schools 1919 S. Burnside Avenue Los Angeles CA 90016 Xochitl Lyra, Operations Manager (323) 939-6400

Woodland Hills Private School 22555 Oxnard St. Woodland Hills, CA 91367 Serena Koegler, COO (818) 348-6563

Woodcrest School 6043 Tampa Ave Tarzana CA, 91356 Nate Akiva (818) 708-2710

Better World Technology 11921 Freedom Drive, Suite 500 Reston, VA 20190 USA John Jordan (312) 414-0206

Pace Freight 12719 Chadron Avenue Hawthorne, CA 90250 Jose Solis (310)263-7500

Livingston and Omens 1900 Avenue of the Stars, Suite 400 Los Angeles, CA 90067 Randy Magnin (310) 201-4358 extension 102

Vista Investments Mgmt. Co. 2225 Campus Drive El Segundo, CA 90245 Juan LLaca (310)725-8200

ategory Twhttps://bluechipcomputer.sharepoint.com/sites/edu/Shared Documents/2022/Lakeside/Blue Chip response to 0023-22C.1 akeside Union School District.pdf.docxo Lakeside.docx 2/24/22

### **TENTATIVE AGREEMENT**

### **BETWEEN THE**

### LAKESIDE UNION SCHOOL DISTRICT

### AND THE

# CALIFORNIA SCHOOL EMPLOYEES ASSOCIATION

LAKESIDE/OLD RIVER CHAPTER NO. 730

**JULY 1, 2019 – JUNE 30, 2022** 

(February 16, 2022)

This Agreement ("Agreement") is entered into by and between the Lakeside Union School District ("District") and the California School Employees Association, Lakeside/Old River Chapter No. 730.

As a result of negotiations, the District and the Association have agreed to a Tentative Agreement as set forth below.

### ARTICLE IV EVALUATION PROCEDURES

A. <u>Probationary</u> unit members will be evaluated on an on-going basis and formally in writing at least once during the probationary period. <u>Effective July 1, 2020</u>, the probationary period will be <u>ene year</u> six months, or 130 days, whichever is longer.

B – G: No Changes.

### ARTICLE V HOURS AND OVERTIME

A – G: No Changes.

### Extra-Time

H. Regular part-time bargaining unit **members** employees whose workday is four or more hours per day will be offered extra hours to fill the position of an employee on any type of leave except Extended Sick Leave. The extra hours shall be offered to the most senior employee in the classification to be covered. The regular part-time employee shall accrue seniority, sick leave, vacation, holidays, and health insurance at the longer hours as guaranteed to them by the Education Code. If no regular part-time **bargaining unit member** employee is available, a substitute will be hired to cover the vacancy. Employees Bargaining unit members whose assignment is less than 6 hours per day will be limited to 1,026 hours total per year, including both normal assignment and extra hours.

Remainder of Article: No Changes.

ARTICLE VI HOLIDAYS

(Status Quo)

### ARTICLE XI PAY AND ALLOWANCES

### Regular Rate of Pay

A. The regular rate of pay for each position in the bargaining unit shall be in accordance with the rates established for each class as provided for in Appendix A which shall be in effect from July 1, 2021 through December 31, 2021. [Appendix A reflects a two percent (2%) on-schedule increase to all ranges not increased by minimum wage effective January 1, 2022. The on-schedule increase will be retroactive to July 1, 2021 and will apply to base salary only.] Effective January 1, 2022 Appendix A-1 shall be in effect. The 2018-2019 salary schedule shall remain in effect for the 2019-2020 school year. In addition bargaining unit members will receive a one time 2% off-schedule lump sum bonus based on Appendix A.

### B - C: No Changes.

#### Uniforms

D. Food Service and MOT bargaining unit members shall be provided a Uniform Order Form by June 1 of each year. The District shall provide up to \$200.00 (in credit) per work-year for District approved uniforms (shirts, jackets, and pants). Food Service and MOT bargaining unit members shall submit their Uniform Order Form by June 15 to be supplied with their uniform by August 15 of each year. Uniform delivery is dependent on the vendor and uniform availability. Uniforms must be worn unless excused by the MOT Director (or designee) due to the nature of the work.

The District may, if requested by the employee, provide up to \$150.00 per work-year for District approved uniforms, (shirts, hats, jackets, excluding pants), which must be purchased and receipts provided to the District by October 1 of the applicable school-year in order to be eligible for reimbursement.

#### Safety Equipment

E. Should the employment duties of an bargaining unit member employee in the bargaining unit reasonably require use of any equipment to I ensure their his/her safety or others, the District agrees to either furnish such equipment or reimburse to the bargaining unit member for the full cost of procuring the equipment. Additionally, the District will provide annually one (1) pair of approved safety boots/shoes (for bargaining unit members required to wear safety boots/shoes) through a District vendor which must be worn during duty hours.

### F - H: No Changes.

### Longevity Stipend

I. Longevity stipends will be provided in accordance with the provisions of the Salary Schedule, effective at the beginning of the specified year. The longevity stipends will be included in the employee's monthly salary following the completion of the required years of service:

15 years – two (2) percent of current salary

20 years - three (3) four (4) percent of current salary [for a total of six percent (6%)]

25 years – five (5) six (6) percent of current salary [for a total of twelve percent (12%)]

### Mileage

- J. The District will reimburse employees for mileage at the Board authorized rate when they are authorized by the District to use their personal vehicles.
- K. Effective July 1, 2021 one bargaining unit member from each school site who performs Associated Student Body bookkeeping duties, will receive an annual stipend of one-thousand dollars (\$1,000.00). The stipend will be split into two (2) separate payments to be paid in the January and June pay warrants.

[The District proposes to include the ASB duties in the Job Description for the School Secretary and increase the hourly rate by \$.64 effective July 1, 2022. This language for TA only.]

K. Effective upon ratification of the Tentative Agreement, bargaining unit members who have obtained a Bilingual certification from a District approved entity and are required to perform verbal and written translation/interpretation services for students, parents and/or employees will receive a monthly Bilingual Stipend of twenty-five dollars (\$25). Bargaining unit members with a Bilingual certification who perform verbal and written translation/interpretation services will receive a monthly stipend of fifty dollars (\$50). Each school site may designate up to three (3) bargaining unit members to perform these services.

### ARTICLE XII HEALTH AND WELFARE BENEFITS

A. The District "cap" on health and welfare premiums for the 2021-2022 2019-2020 benefit plan year is \$20,434.56 18,970.56. Employees are responsible for additional health and welfare premiums above the District's cap.

- B. Medical benefits shall be provided through Blue Cross (SISC) for eligible employees and dependents which includes prescription coverage. The following medical plan is currently available to eligible employees: Blue Cross 100-D \$20; Rx 9-35.
- C. Dental benefits shall be provided through Delta Dental (SISC) for eligible employees and dependents. The Delta Dental (DD 1000) is fully covered by the District. The following dental plans are available to eligible employees as buy-up options:
  - Delta Dental (PPO 2000; A 100/3000)
  - Anthem Dental (DHN 4000; Ortho 2000)
- D. Vision benefits shall be provided through Vision Service Plan (Signature C \$10) for eligible employees and dependents.
- E. Term life insurance at \$65,000 shall be provided to eligible employees through Mutual of Omaha.
- F. These bargaining unit members employed by the District prior to July 1, 1990, for four or more hours per day, shall receive fringe benefits paid in full by the District. Bargaining unit members employed less than four hours are not entitled to any benefits under the provisions of this Article. Employees may subscribe at their own expense through payroll deduction provided the insurer allows this provision. No in-lieu payments shall be made to any employee.

G - K: No Changes.

ARTICLE XXIII CONCLUSION

(Status Quo)

### OTHER MATTERS

- 1. The Parties agree to cooperate in preparing a final agreement that will contain the agreements set forth in this Tentative Agreement. The Parties acknowledge and agree that there may be certain language clean-up of a non-substantive nature that will be corrected in the final agreement. The Parties must mutually agree to any clean-up requests or the change shall not be made.
- 2. All other terms and conditions of the 2019-2022 Collective Bargaining Agreement shall remain unchanged.
- 3. The on-schedule increase will be retroactive to July 1, 2021 and will apply to base salary only. Only those unit members employed on the date of the Association's ratification of this Tentative Agreement are eligible for the on-schdule increase and the one-time off-schedule salary bonus.
- 4. This Tentative Agreement is entered into pursuant to the provisions of Sections 3540-3549 of the California Government Code.

This Tentative Agreement is subject to ratification by the Association membership and approval by the Lakeside Union School District Board of Trustees.

#### RECOMMENDED FOR RATIFICATION

LAKESIDE UNION SCHOOL DISTRICT

Murch Z February\_, 2022

Superintendent

CSEA CHAPTER NO. 730

February \_\_\_\_, 2022

Margarita Aguirre

President

Menica Guerrere Angelina Botelho

**CSEA LRR** 

### **APPENDIX "A"**

### (2021-2022 CLASSIFIED SALARY SCHEDULE)

Date: February 25, 2022

To: Board of Trustees & Superintendent, Lakeside Union School District

From: Lakeside/Suburu Teachers Association

Joseph Andreotti, President

Re: Initial Sunshine Proposal 2022-23 Collective Bargaining Negotiations

In compliance with Government Code Section 3547 and consistent with Article XIX Section B of the Collective Bargaining Agreement, the Lakeside Teachers Association makes the following sunshine proposal regarding the terms and conditions of employment for the Association's bargaining unit members:

### 1. Article II Salary

The Association shall propose changes to the existing language that continues the shared the District's vision of offering a compensation package for Bargaining Unit Members that helps the District <u>attract and retain</u> a stable teaching force that is beneficial for all LUSD students and families.

#### 2. Article III Health Benefits

The Association will propose changes to the existing plan and language that continues the share the District's vision of offering a health benefit package for Bargaining Unit Members that will help the District <u>attract and retain</u> a stable teaching force, that is healthy for all LUSD students and families.

### **Two Additional Items:**

### 3. Article IV Class Size

The Association will propose changes to the existing language.

### 4. Article V Hours

The Association will propose changes to the existing language.

The Association may offer counter-proposals, withdrawal of proposals, and/or other changes to proposals responsive to discussions occurring during negotiations. All provisions of the Collective Bargaining Agreement not addressed in the course of this negotiations are to remain unchanged. The Association looks forward to a productive, amicable, and equitable settlement for the 2022-2023 school year negotiations.

Sincerely,

Joseph Andreotti, President

Lakeside/Suburu Teachers Association

# Lakeside

### **Lakeside Union School District**

14535 Old River Road Bakersfield, CA 93311

> Phone: (661) 836-6658 FAX: (661) 836-8059

TO: Ty Bryson, Superintendent

FROM: J. Elcano, Director of Student Services

RE: New Position, Psychologist Intern

DATE: February 24, 2022

#### Recommendation(s):

Approval is requested for a new certificated position of School Psychologist Intern.

#### How does this action support student achievement?

The School Psychologist Intern position would provide support for the new Pre-School Special Day Classroom, provide on-going support with psychoeducational assessments for both school sites, and provide support for mental health services to all students.

#### Status:

Lakeside Union School District's take back of our preschool students will require additional assessments in the form of C to B Assessments (students moving from Kern Regional support to District support), preschool assessments (assessments of 4 and 5 year olds), and Transition to Kindergarten Assessments. Previously, LUSD was using and paying our County Office of Education to provide these assessment services for the district.

#### Background:

LUSD anticipates an increase of approximately 40-50 assessments yearly with the addition of Preschool SDC. In addition, LUSD has increased the student services and disabilities that we are able to serve within our own school district over the past 3 years by extending Special Day Classes offered from PreSchool-8th grade.

#### Goal(s):

**LCAP Goal 1:** All students will demonstrate growth towards meeting or exceeding standards in English Language Arts, Math, Science, History/Social Science and English Language Development, as demonstrated through state assessments, local formative assessments and course grades.

**LCAP Goal 2:**The district will provide an engaging and nurturing environment where students will demonstrate a positive growth in attendance rates, decrease in student suspension and expulsion and increase in parental involvement.

**LCAP Goal 3:** The district will continue to hire the most qualified teachers and train them in the latest instructional strategies, maintain clean, safe, functional facilities that are in good repair, and provide sufficient standards aligned instructional materials in core academics to all students with a focus on

Funding Source(s):	
Amount: \$20,000 stipend per year for 1200 hours completed	
Responsible Staff:  Joaquin Elcano: Director of Student Services	
Supporting Document(s) School Psychologist Intern Job Description	
Approved by:	Date:

Students with Disabilities, English Learners, low income, and foster youth. This goal will increase the quality of instruction and have a positive impact on student growth.