

DATA SHEET

BENEFITS

GUARANTEED COMPATIBILITY AND COMPLIANCE

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

FACTORY TESTED

- Every batch of Ruckus 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

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.

Extensive performance and reliability testing reflects an ongoing commitment to quality. Ruckus 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 Ruckus products. The speed, capacity, reliability, and low cost of ownership that Ruckus is known for is also provided in all optical components.

By using Ruckus-qualified components, organizations can be assured that their quality, warranty and service requirements will be met and that their Ruckus 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 Ruckus investments, accelerate new technology deployments, and optimize the performance of networking infrastructures.

MAXIMIZING INVESTMENTS

To help optimize technology investments, Ruckus and its partners offer complete solutions that include professional services, technical support, and education. For more information, contact a Ruckus sales partner or visit www.ruckuswireless.com.

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 OPTICS	
<ul style="list-style-type: none"> 100 Megabit Ethernet (MbE) transceivers support link lengths from 2 km to 40 km Both SMF and MMF fiber types 	<ul style="list-style-type: none"> RoHS 5 and 6 compliant Enterprise switching and routing
1 GBE OPTICS	
<ul style="list-style-type: none"> 1 GbE transceivers support link lengths from 300 m to 100 km Both SMF and MMF fiber types Coarse Wavelength Division Multiplexing (CWDM) support for distances of 80 km to 100 km 	<ul style="list-style-type: none"> RoHS 5 and 6 compliant For core routers and security applications
10 GBE OPTICS	
<ul style="list-style-type: none"> 10 GbE transceivers support link lengths of 26 m to 80 km Protocol-independent Less than one-third the power and size of MSA optic Hot-swappable Digital Optical Monitoring (DOM) support 	<ul style="list-style-type: none"> RoHS 5 and 6 compliant Application delivery and acceleration High-Performance Computing (HPC) interconnects Service provider traffic management
40 GBE QSFP+ OPTICS	
<ul style="list-style-type: none"> 40 GbE transceivers support link lengths from 100 m to 40 km Hot-pluggable Industry-standard QSFP+ 	<ul style="list-style-type: none"> Digital Optical Monitoring (DOM) support High-density 40 GbE connectivity options for data center, enterprise, and service provider applications
100 GBE QSFP+ OPTICS	
<ul style="list-style-type: none"> 100 GbE transceivers support link lengths up to 40 km Hot-pluggable Industry-standard QSFP+ 	<ul style="list-style-type: none"> Digital Optical Monitoring (DOM) support Carrier, service provider, and cloud services Enterprise campus core routing RoHS 6 compliant

Specifications subject to change.

PRODUCT SUPPORT FOR FAST ETHERNET

	ICX 7000 Series					ICX 6000 Series		
FAST ETHERNET OPTICS	ICX 7150	ICX 7250	ICX 7450	ICX 7650	ICX 7750	ICX 6430	ICX 6450	ICX 6610
E1MG-100FX-OM			●	●		●	●	● ¹
E1MG-100FX-A			●	●				
E1MG-100FX-IR-OM			●	●				● ¹
E1MG-100FX-LR-OM			●	●				● ¹

¹ Available only with Ruckus ICX 6610-24F.

PRODUCT SUPPORT FOR 1 GIGABIT ETHERNET

	ICX 7000 Series					ICX 6000 Series			Wi-Fi Access Points	
1 GBE FIBER OPTICS	ICX 7150	ICX 7250	ICX 7450	ICX 7650	ICX 7750	ICX 6430	ICX 6450	ICX 6610	T710	T811cm
E1MG-SX-OM	●	●	●	●	●	⊙ ¹	●	●	●	●
E1MG-SX-OM-T	●	●	●	●	●	⊙ ¹	●	●	●	●
E1MG-SX-A	●	●	●	●	●	⊙ ¹	●	●	●	●
E1MG-LX-OM	●	●	●	●	●	●	●	●	●	●
E1MG-LX-OM-T	●	●	●	●	●	⊙ ¹	●	●	●	●
E1MG-LX-A	●	●	●	●	●				●	●
E1MG-LHA-OM						●	●	●	●	●
E1MG-LHA-OM-T	●	●	●	●	●				●	●
E1MG-BXD	●	●	●	●	● ²	●	●	●	●	●
E1MG-BXU	●	●	●	●	● ²	●	●	●	●	●
E1MG-TX	●	●	●	●	●	⊙ ¹	●	●		
E1MG-TX-A	●	●	●	●	●	⊙ ¹	●	●		
1G-SFP-TWX-XXXX	●	●	●	●		⊙ ¹	●			

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

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

¹ Stacking is not supported on the Ruckus ICX 6430 12-port compact switch.

² Requires FI software 8.0.30b or later.

PRODUCT SUPPORT FOR 10 GIGABIT ETHERNET

	ICX 7000 Series					ICX 6000 Series		
10 GBE FIBER OPTICS	ICX 7150	ICX 7250	ICX 7450	ICX 7650	ICX 7750	ICX 6430	ICX 6450	ICX 6610
10G-SFPP-USR	⊙	⊙	⊙	●	●		⊙ ²	●
10G-SFPP-USR-SA	⊙	⊙	⊙	●	●			
10G-SFPP-SR	⊙	⊙	⊙	●	●		⊙ ¹	●
10G-SFPP-SR-SA	⊙	⊙	⊙	●	●			
10G-SFPP-SR-S	⊙	⊙	⊙	●	●			
10G-SFPP-LR	⊙	⊙	⊙	●	●		●	●
10G-SFPP-LR-SA	⊙	⊙	⊙	●	●			
10G-SFPP-LR-S	⊙	⊙	⊙	●	●			
10G-SFPP-ER	●	●	●	●	●		●	●
10G-SFPP-ZR	●	●	●	●	●			
10G-SFPP-LRM			●	●			⊙ ¹	●
10G-SFPP-LRM-X-ADP	● ²	● ²			● ²			
10G-SFPP-BXD-S	⊙	⊙	⊙	●	●			
10G-SFPP-BXU-S	⊙	⊙	⊙	●	●			
10G-SFPP-TWX-XXXX	⊙	⊙	⊙	●	●		●	⊙
10G-SFPP-TWX-P-XXXX	⊙ ³	⊙	⊙	●	●			
10GE-SFPP-AOC-XXXX		●	●	●	●			

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

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

¹ Stacking is not supported on the Ruckus ICX 6430 12-port compact switch.

² Requires FI software 8.0.61 or later.

³ 1 m and 3m cable length only, 5 m is not supported on the 7150.

PRODUCT SUPPORT FOR 40 GIGABIT ETHERNET

	ICX 7000 Series					ICX 6000 Series		
40 GBE FIBER OPTICS	ICX 7150	ICX 7250	ICX 7450	ICX 7650	ICX 7750	ICX 6430	ICX 6450	ICX 6610
E40G-QSFP-SR4			○	○	○			
E40G-QSFP-SR4-INT				●	●			
E40G-QSFP-ESR4			●	●	●			
E40G-QSFP-LR4			○	○	○			
E40G-QSFP-LR4-INT				●	●			
E40G-QSFP-LM4			●	○	○			
E40G-QSFP-ER4			●	○	○			
E40G-QSFP-SR-BIDI			●	○	○			
E40G-QSFP-4SFP-C-XXXX					●			
E40G-QSFP-4SFP-AOC-XXXX					●			
E40G-QSFP-QSFP-C-XXXX			○	○	○			
E40G-QSFP-C-XXXXX			○	○	○			○
40G-QSFP-C-005XX			○	○	○			○
E40G-QSFP-QSFP-AOC-XXXX			●	○	○			

- Optics supported for both stacking links and Ethernet data links.
- Optics supported for Ethernet data links only (i.e. not for stacking).
- 40 GbE ports on the Ruckus ICX 6610 are supported for stacking only.

PRODUCT SUPPORT FOR 100 GIGABIT ETHERNET

	ICX 7000 Series					ICX 6000 Series		
100 GBE FIBER OPTICS	ICX 7150	ICX 7250	ICX 7450	ICX 7650	ICX 7750	ICX 6430	ICX 6450	ICX 6610
E100G-QSFP28-SR4				○				
E100G-QSFP-ESR4				○				
E100G-QSFP28-LR4L-2KM				○				
E100G-QSFP28-LR4-10KM				○				
E100G-QSFP28-LR4-LP-10KM				○				
E100G-QSFP28-CWDM4-2KM				●				
E100G-QSFP-QSFP-AOC-XXXX				○				
E100G-QSFP-QSFP-P-XXXX				○				

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

Specifications subject to change.

KEY STANDARDS AND FEATURES

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

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

PART NUMBER	1000BASE-T COPPER						
E1MG-TX	802.3ab	CSA 60950-1-03/ UL	EN 60950-1	N/A	Cat5	100 m	N/A
1G-SFP-TWX-0x01	802.3z	Direct-attached SFP copper cables				1 m, 5 m	No

PART NUMBER	10 GBE FIBER						
10G-SFPP-USR	N/A	FDA 21CFR 1040.10 Class 1, CSA 60950-1-03/ UL 60950-1	EN 60825-1, EN 60950-1	850	MMF	100 m	Yes
10G-SFPP-SR	802.3ae			850	MMF	26 m to 300 m	
10G-SFPP-LR	802.3ae			1,310	SMF	10 km	
10G-SFPP-ER	802.3ae			1,550	SMF	40 km	
10G-SFPP-ZR	802.3ae			1,550	SMF	80 km	
10G-SFPP-BXD-S	802.3ae			1330-TX/ 1270-RX	SMF	10 km	
10G-SFPP-BXU-S	802.3ae			1270-TX/ 1330-RX	SMF	10 km	
10G-SFPP-LRM	802.3ae			1,310	OM3 MMF OM4 MMF	220 m 300 m	

Specifications subject to change.

KEY STANDARDS AND FEATURES

	IEEE Standards	Domestic Safety Standards	International Safety Standards	Wavelength (nm)	Fiber Type	Maximum Cable Distance	Digital Optical Monitoring
PART NUMBER	10GBASE CABLE						
10G-SFPP-TWX-XXXX	802.3ak	Direct-attached SFP+ Twinax active copper cables				1 m, 3 m, 5 m	No
10G-SFPP-AOC-XXXX	N/A	Direct-attached SFP+ active optical cables				7 m, 10 m	Yes
10G-SFPP-TWX-P-XXXX	802.3ak	Direct-attached SFP+ Twinax passive copper cables				1 m, 3 m, 5 m	No

	40 GBE FIBER						
E40G-QSFP-SR4	802.3ba	FDA 21CFR 1040.10 Class 1, CSA 60950-1-03/ UL 60950-1	EN 60825-1, EN 60950-1	850	OM3 MMF OM4 MMF	100 m 150 m	Yes
E40G-QSFP-SR4-INT (compatible with 10GBASE-SR)	802.3ba				OM3 MMF OM4 MMF	100 m 150 m	Yes
E40G-QSFP-LR4	802.3ba			1264.5 to 1337.5	SMF	10 km	Yes
E40G-QSFP-LR4-INT	802.3ba			1310	SMF	10 km	Yes
E40G-QSFP-ER4	802.3ba			1310	SMF	40 km	Yes
E40G-QSFP-ESR4	802.3ba			850	OM3 MMF OM4 MMF	300 m 400 m	Yes
E40G-QSFP-LM4	802.3ba			1264.5 to 1337.5	OM3/OM4 MMF	160 m	Yes
E40G-QSFP-SR-BIDI	802.3ba			850 to 900	OM3/OM4 MMF	100 m	Yes

	40 GBE COPPER						
E40G-QSFP-4SFP-C-XXXX	N/A	Direct-attached QSFP+ to 4 SFP+ active copper breakout cables				1 m, 3 m, 5 m	No
E40G-QSFP-QSFP-C-XXXX	N/A	Direct-attached QSFP+ to QSFP+ active copper cables				1 m, 3 m, 5 m	No
40G-QSFP-C-005XX E40G-QSFP-C-XXXX	N/A	Direct-attached QSFP+ to QSFP+ passive copper cables				0.5 m, 1 m, 5m	No
E40G-QSFP-QSFP-AOC-XXXX	N/A	Direct-attached QSFP+ to QSFP+ active optical cables				10 m	No
E40G-QSFP-4SFP-AOC-XXXX	N/A	Direct-attached QSFP+ to 4 SFP+ active optical breakout cables				10 m	No

Specifications subject to change.

KEY STANDARDS AND FEATURES

	IEEE Standards	Domestic Safety Standards	International Safety Standards	Wavelength (nm)	Fiber Type	Maximum Cable Distance	Digital Optical Monitoring	
PART NUMBER	100 GBE QSFP28 FIBER							
E100G-QSFP28-SR4	802.3bm	North America: UL/CSA 60950, CDRH Class 1		850	MMF	100 m	Yes	
E100G-QSFP28-LR4	802.3bm			1295, 1300, 1305, 1310	SMF	10 km		
E100G-QSFP28-LR4-LP	802.3ba				SMF	10 km		
E100G-QSFP28-LR4L	802.3ba			European Union: EN 60950, EB 60825 Class 1	1295, 1300, 1305, 1310	SMF		2 km
E100G-QSFP28-CWDM4	802.3am			1310	SMF	2 km		

PART NUMBER	100 GBE QSFP FIBER						
E100G-QSFP-ESR4	802.3bm	North America: UL/CSA 60950, CDRH Class 1		850	MMF	300 m	Yes
E100G-QSFP-QSFP-AOC-1001	802.3bm			European Union: EN 60950, EB 60825 Class 1	N/A	MMF	10 m
E100G-QSFP-QSFP-P-XXXX	N/A	Direct-attached QSFP + to QSFP + copper cables				1 m, 3 m, 5 m	N/A

Specifications subject to change.

RUCKUS ETHERNET OPTICS ORDERING INFORMATION

PART NUMBER	100 MBE SFP TRANSCEIVERS
E1MG-100FX-A	100Base-FX SFP optic MMF, LC connector, Optical Monitoring Capable, TAA complaint
E1MG-100FX-A8	100Base-FX SFP optic MMF, LC connector, Optical Monitoring Capable, TAA complaint, 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 8 Pack, LC connector, Optical Monitoring Capable

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-CWDM80-1470	CWDM SFP optic, 80Km, 1470nm, LC connector
E1MG-CWDM80-1490	CWDM SFP optic, 80Km, 1490nm, LC connector
E1MG-CWDM80-1510	CWDM SFP optic, 80Km, 1510nm, LC connector
E1MG-CWDM80-1530	CWDM SFP optic, 80Km, 1530nm, LC connector
E1MG-CWDM80-1550	CWDM SFP optic, 80Km, 1550nm, LC connector
E1MG-CWDM80-1570	CWDM SFP optic, 80Km, 1570nm, LC connector
E1MG-CWDM80-1590	CWDM SFP optic, 80Km, 1590nm, LC connector
E1MG-CWDM80-1610	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 (70km), Industrial Temperature
E1MG-LX-A	1000BASE-LX SFP Optic, SMF, LC Connector, TAA Complaint, 1-Pack
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 8 Pack, SMF, LC connector, Optical Monitoring Capable
E1MG-LX-OM-T	1000Base-LX SFP optic, SMF, LC connector, Optical Monitoring Capable, Industrial Temperature
E1MG-SX-A	1000BASE-SX SFP Optic, MMF, (LC), TAA
E1MG-SX-A8	1000BASE-SX SFP Optic, MMF, (LC), TAA, 8-PCK
E1MG-SX-OM	1000Base-SX SFP optic, MMF, LC connector, Optical Monitoring Capable
E1MG-SX-OM-8	1000Base-SX SFP optic 8 Pack, MMF, LC connector, Optical Monitoring Capable
E1MG-SX-OM-T	1000Base-SX SFP optic, MMF, LC connector, Optical Monitoring Capable, Industrial Temperature
E1MG-TX	1000BASE-TX SFP Copper, RJ-45 Connector
E1MG-TX-A	1000BASE-TX SFP Copper, RJ-45, TAA
E1MG-TX-A8	1000BASE-TX SFP Copper, RJ-45, TAA, 8-PACK
1G-SFP-TWX-0101	Direct Attached 1G SFP Copper CABLE, 1M, STACKING CABLE
1G-SFP-TWX-0501	Direct Attached 1G SFP Copper CABLE, 5M, STACKING CABLE

Specifications subject to change.

RUCKUS ETHERNET OPTICS ORDERING INFORMATION

PART NUMBER	10 GBE SFP+
10G-SFPP-BXD-S	10GE LR SFP+ Optic (LC) Bidirectional DOWNSTREAM, Standard Temperature
10G-SFPP-BXU-S	10GE LR SFP+ Optic (LC) Bidirectional UPSTREAM, Standard Temperature
10G-SFPP-ER	10GBASE-ER SFP+ optic (LC), for up to 40km over SMF
10G-SFPP-ER-2	10GBASE-ER SFP+ optic (LC), for up to 40km over SMF 2-pack
10G-SFPP-LR	10GBASE-LR, SFP+ optic (LC), for up to 10km over SMF
10G-SFPP-LR-8	10GBASE-LR, SFPP SMF LC Connector 8-PACK
10G-SFPP-LR-S	10GBASE-LR, SFPP SMF LC Connector (No TAA)
10G-SFPP-LR-S8	10GBASE-LR, SFPP SMF LC Connector 8-Pack (No TAA)
10G-SFPP-LR-SA	10GBASE-L+B27R, SFP+ optic (LC), for up to 10km over SMF Standard Temperature-TAA COMPLIANT
10G-SFPP-LR-SA8	10GBASE-LR, SFP+ optic (LC), for up to 10km over SMF -Standard Temperature-TAA COMPLIANT- 8 pack
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, 1-pack with LRM Adapter for ICX7150, ICX7250 and ICX7750
10G-SFPP-LRM-2-ADP	10GBASE-LRM SFP+ Optic (LC), for up to 220m over MMF, 2-pack with LRM Adapter for ICX7150, ICX7250 and ICX7750 SFP+ ports
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 (No TAA)
10G-SFPP-SR-S8	10GBASE-SR, S FPP MMF LC Connector 8-PACK (No TAA)
10G-SFPP-SR-SA	10GBASE-SR, SFP+ optic (LC), target range 300m over MMF Standard Temperature-TAA COMPLIANT
10G-SFPP-SR-SA8	10GBASE-SR, SFP+ optic (LC), target range 300m over MMF Standard Temperature-TAA COMPLIANT-8 pack
10G-SFPP-TWX-0101	Direct Attached SFPP ACTIVE Copper, 1M, 1-PACK
10G-SFPP-TWX-0108	Direct Attached SFPP Copper, 1M, 8-PACK
10G-SFPP-TWX-0301	Direct Attached SFPP ACTIVE Copper, 3M, 1-PACK
10G-SFPP-TWX-0308	Direct Attached SFPP Copper, 3M, 8-PACK
10G-SFPP-TWX-0501	Direct Attached SFPP ACTIVE Copper, 5M, 1-PACK
10G-SFPP-TWX-0508	Direct Attached SFPP Copper, 5M, 8-PACK
10G-SFPP-TWX-P-0101	Passive Direct Attached SFP+ Copper, 1MTR, 1-PK
10G-SFPP-TWX-P-0108	Passive Direct Attached SFP+ Copper, 1MTR, 8-PK
10G-SFPP-TWX-P-0301	Passive Direct Attached SFP+ Copper, 3MTR, 1-PK
10G-SFPP-TWX-P-0308	Passive Direct Attached SFP+ Copper, 3MTR, 8-PK
10G-SFPP-TWX-P-0501	Passive Direct Attached SFP+ Copper, 5MTR, 1-PK
10G-SFPP-TWX-P-0508	Passive Direct Attached SFP+ Copper, 5MTR, 8-PK
10G-SFPP-USR	10GE USR SFP+ optic (LC), target range 100m over MMF, 1-pack
10G-SFPP-USR-8	10GE USR SFP+ optic (LC), target range 100m over MMF, 8-pack
10G-SFPP-USR-SA	10GE USR SFP+ Optic (LC), Range 100M MMF, Standard Temperature, TAA Compliant, 1-Pack

Specifications subject to change.

RUCKUS ETHERNET OPTICS ORDERING INFORMATION

10G-SFPP-USR-SA8	10GE USR SFP+ Optic (LC), Range 100M MMF, Standard Temperature, 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), 80KM Over SMF 2-pack
10GE-SFPP-AOC-0701	10GE SFP+ Direct Attached Active Optical Cable, 7m, 1-pack
10GE-SFPP-AOC-1001	10GE SFP+ Direct Attached Active Optical Cable, 10m, 1-pack
PART NUMBER	40 GBE QSFP+
E40G-QSFP-SR4	40GBASE-SR4 QSFP+ optic (MTP 1x8 or 1x12), 100 m over MMF OM3. 150 m over MMF OM4, 1-pack
E40G-QSFP-SR4-8	40GBASE-SR4 QSFP+ optic (MTP 1x8 or 1x12), 100 m over MMF OM3. 150 m over MMF OM4, 1-pack 8-pack
E40G-QSFP-SR4-INT	40GBASE-SR4 QSFP+ optic (MTP 1x8 or 1x12), 100m over MMF, compatible with 10GBASE-SR, 10G breakout-capable, 1-pack
E40G-QSFP-ESR4	40GBASE-ESR4 QSFP+ optic (MTP 1x8 or 1x12), 300m over MMF, 1-pack
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-SR4-INT	40GBASE-SR4 QSFP+ optic (MTP 1x8 or 1x12), 100 m over MMF (10GBASE-SR compatible, breakout-capable)
E40G-QSFP-LR4	40GBase-LR4 QSFP+ optic (LC), for up to 10km over SMF, 1-pack
E40G-QSFP-LR4-8	40GBase-LR4 QSFP+ optic (LC), for up to 10km over SMF, 8-pack
E40G-QSFP-LR4-INT	40GBase-LR4 QSFP+ to 4 SFP+ optic (LC), for up to 10km over SMF, 1-pack
E40G-QSFP-LM4	40GBASE-LM4 QSFP+, 1310nm, 160m over duplex LC OM4 MMF
E40G-QSFP-SR-BIDI	40GE SR QSFP+ optic (LC), bidirectional, 100 m over OM3 MMF
E40G-QSFP-4SFP-AOC-1001	4x10GE Direct Attached QSFP+ to 4 SFP+ Active Optical Breakout Cable, 10m, 1-pack
E40G-QSFP-4SFP-C-0101	4x10GE Direct Attached QSFP+ to 4 SFP+ Active Copper Breakout Cable, 1 m, 1-pack
E40G-QSFP-4SFP-C-0301	4x10GE Direct Attached QSFP+ to 4 SFP+ Active Copper Breakout Cable, 3 m, 1-pack
E40G-QSFP-4SFP-C-0501	4x10GE Direct Attached QSFP+ to 4 SFP+ Active Copper Breakout Cable, 5 m, 1-pack
E40G-QSFP-QSFP-AOC-1001	40GE Direct Attached QSFP+ to QSFP+ Active Optical Cable, 10m, 1-pack
E40G-QSFP-QSFP-C-0101	40GE Direct Attached QSFP+ to QSFP+ Active Copper cable, 1 m, 1 pack
E40G-QSFP-QSFP-C-0301	40GE Direct Attached QSFP+ to QSFP+ Active Copper cable, 3 m, 1 pack
E40G-QSFP-QSFP-C-0501	40GE Direct Attached QSFP+ to QSFP+ Active Copper cable, 5 m, 1 pack
40G-QSFP-C-00501	40GE QSFP Direct Attached Passive Copper Cable, 0.5m, 1-pack
E40G-QSFP-C-0101	40GE QSFP Direct Attached Passive Copper Cable, 1m 1-pack
E40G-QSFP-C-0501	40GE QSFP Direct Attached Passive Copper Cable, 5m, 1-pack
40G-QSFP-C-00508	40GE QSFP Direct Attached Passive Copper Cable, 0.5m, 8-pack

Specifications subject to change.

RUCKUS ETHERNET OPTICS ORDERING INFORMATION

PART NUMBER	100 GBE QSFP28
E100G-QSFP28-SR4	100 GbE QSFP28 optic (MTP 1x12), SR4, for distances up to 100 m over MMF
E100G-QSFP-ESR4	100GBASE-ESR4 QSFP+ optic (MTP 1x8 or 1x12), 300m over MMF, 1-pack
E100G-QSFP28-LR4L-2KM	100 GbE QSFP28 LR4 lite transceiver 2 km over SMF
E100G-QSFP28-LR4-10KM	100 GbE QSFP28 optic (LC), LR4, for distances up to 10 km over SMF
E100G-QSFP28-LR4-LP-10KM	100 GbE QSFP28 optic (LC), LR4 low power, for distances up to 10 km over SMF
E100G-QSFP28-CWDM4-2KM	100 GbE QSFP28 optic (LC), CWDM4, for distances up to 2 km over SMF
E100G-QSFP-QSFP-P-0101	100 GbE QSFP28 direct-attached passive copper cable 1-pack, 1 m.
E100G-QSFP-QSFP-P-0301	100 GbE QSFP28 direct-attached passive copper cable 1-pack, 3 m.
E100G-QSFP-QSFP-P-0501	100 GbE QSFP28 direct-attached passive copper cable 1-pack 5 m.
E100G-QSFP-QSFP-AOC-1001	100GE Direct Attached QSFP+ to QSFP+ Active Optical Cable, 10m, 1-pack

Specifications subject to change.

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