



CONNECTION GUIDE

Product Overview



ETHERNET SWITCHES | PoE SOLUTIONS | ACCESSORIES
MEDIA CONVERTERS | ETHERNET EXTENDERS | WIRELESS



Reliability when connectivity is crucial.

EtherWAN's established product lines and customizable features are built to support the long-term health of your network. With managed and unmanaged options, we have the right networking solution for nearly any communications challenge your urban infrastructure may face. EtherWAN's product range includes Ethernet switches, media converters, Ethernet extenders, and Power over Ethernet products built in a wide variety of form factors and environmental grades.

About EtherWAN

Founded in 1996 by NASA Engineers, EtherWAN's Ethernet expertise in Urban Infrastructures provides connectivity solutions that make communities safe and secure. From in-house designed, engineered and manufactured products to the implementation for customers of all sizes, EtherWAN achieves an unparalleled level of reliability and quality for applications when connectivity is crucial.

Why EtherWAN?

All of our products come with US-based tech support, so you can receive guidance from purchase through implementation. Our certified Network Engineers can provide help with troubleshooting, network audits, or personal network consulting, both onsite and over the phone.

EtherWAN's products are designed, tested and manufactured in-house to ensure that we are providing only the highest quality connectivity solutions. Whether you need compact sizing or high performance in extreme temperatures, EtherWAN delivers products built with your applications in mind.

Learn network best practices, train employees with tailored courses, and make educated buying decisions with hands-on access to mock traffic intersections, stoplights, TMC, and more. The Customer Experience Lab is EtherWAN's latest investment in showcasing network tech and expertise for ITS, IP Security and Water/Wastewater.



TECH SUPPORT
YOU CAN
RELY ON



LIFETIME
WARRANTY



PURPOSE-BUILT
PRODUCTS



TRAINING FOR
REAL-WORLD
APPLICATIONS



CUSTOMER
EXPERIENCE
LAB
BY EtherWAN



COST SAVINGS

Our hardened-grade products are backed by a lifetime warranty and complimentary support. With registration, you can stay up to date with product updates (firmware, EOL & ECN Notices) and minimize downtime by utilizing our easy service and repairs through our website, EtherWAN.com.

EtherWAN offers network and product-focused classes with tailored industry-specific material. Taught by certified Network Engineers, our courses are offered online and in-person so they are always easily accessible to you.

With our flexible network solutions, you can reduce installation time and costs. Whether you have outdated phone lines, alarm cable or coaxial cable, our products are designed to utilize and seamlessly integrate into your existing infrastructure.

"EtherWAN was a vital part of my success while at the City of Costa Mesa; not only because of the quality product provided, but because of the knowledgeable staff."

Michael Sampson, Associate Traffic Engineer

Network Products Tailored for Your Industry

EtherWAN offers quality solutions for applications in IP Security, Transportation and Water/Wastewater. Our full suite of networking products are TAA compliant for use in government projects.



IP SECURITY

A camera is only as good as the network it's linked to. For implementations large and small, our powerful solutions provide data that travels further, compatibility that connects more high-powered cameras, and network redundancy that heals disruptions in milliseconds. With our history of being first to market with many PoE (Power over Ethernet) products and our exclusive PoL technology (Power over Link), our solutions ensure cost-savings and simple setup.



TRANSPORTATION

New technologies, growing populations, and availability of funding sources means ITS projects expect partners that bring the needed value to keep projects on track. Look to EtherWAN to help determine the network scope, impacts and limitations to get the right technologies implemented for your project. From Wayside communication for metro transit, to ITS applications at intersections and along highways, EtherWAN offers a variety of network solutions that are purpose-built to fit in existing ITS infrastructures.

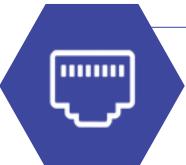
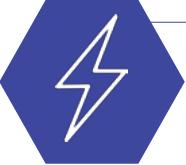
EtherWAN's hardened products are NEMA TS2 certified for ITS and many follow EN50155 standards for rail and station applications.



WATER AND WASTEWATER

From modernizing networks to a focus on environmental impacts, reliable, accurate, and easy-to-maintain network solutions are at the forefront to keep mission-critical systems functioning. Our hardened products work well with SCADA systems and provide a wide range of interoperability to ensure proper integration with existing equipment and communication protocols.

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Hardened & Industrial Layer 3 Ethernet Switches



	Layer 3	Layer 3	Lite Layer 3	Lite Layer 3	Lite Layer 3
Model Name	EG99000	EG97000	EX77900	EX73900	EX78900
Interface					
Max. Total Ports	28	28	28	16	16
Max. 10/100BASE-TX	-	-	-	-	-
Max. 10/100/1000BASE-T	24	8	24	12	12
Max. 100BASE-FX	-	-	-	-	-
Max. 100BASE-SFP	-	-	-	-	-
Max. 1000BASE-SX/LX/BX	-	-	8	4	4
Max. 1000BASE-SFP	8	16	8	4	4
Max. 10 Gigabit SFP+	4	4	4	-	-
PoE Ports	-	-	-	-	8 (60W)
PoE Power Budget	-	-	-	-	240W
RS-232 Console Port	✓	✓	✓	✓	✓
Alarm Contact	✓	✓	✓	✓	✓
Performance					
MAC Address Table Size	24K	24K	16K	16K	16K
Packet Buffer Memory (bits)	32M	32M	12M	12M	12M
Jumbo Frame (bytes)	12K	12K	12K	9216	9216
Mechanical					
Casing	Metal	Metal	Metal	Aluminum	Aluminum
Installation*	R	R	R	D, P	D, P
Dimensions (in) (W x D x H)	17.4 x 14.8 x 1.7	17.4 x 14.8 x 1.7	17.4 x 14.8 x 1.7	2.8 x 5.5 x 6.7	2.8 x 5.5 x 6.7
Power Input					
No. of Power Inputs	2	2	1 or 2	2	2
110 - 240VAC	✓	✓	✓	-	-
Terminal Block	±48VDC	±48VDC	±48VDC	12 - 48VDC	52 - 57VDC
Operating Temperature					
-10 to 60°C (14 to 140°F)	-	-	-	-	-
-40 to 75°C (-40 to 167°F)	✓	✓	✓	✓	✓
Network Redundancy					
Alpha-Ring / Alpha-Chain	✓	✓	✓	✓	✓
STP / RSTP / MSTP	✓	✓	✓	✓	✓
Layer 3 Features					
Static / RIP v1/v2	✓	✓	✓	✓	✓
OSPF	✓	✓	✓	-	-
Multicast Routing	✓	✓	-	-	-
Regulatory Approvals					
CE / FCC / VCCI	✓	✓	✓	✓	✓
ISA 12.12.01	-	-	-	-	-
IEC 61850-3 / IEEE 1613	-	-	✓	✓	-
EN 50121-4	-	-	-	-	-
UL 508 / UL 61010	-	-	-	UL 61010	UL 61010
UL 60950 / UL 62368	UL 62368	UL 62368	UL 62368	-	-
NEMA TS2	✓	✓	✓	✓	✓

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Hardened & Industrial Managed Ethernet Switches

IEC 61850-3
EN 50121-4

IEC 61850-3
EN 50121-4

IEC 61850-3
EN 50121-4

IEC 61850-3
EN 50121-4



Model Name	EX89000	EX29000	EX87000	EX27000	EX77000
Interface					
Max. Total Ports	28	28	28	28	28
Max. 10/100BASE-TX	24	24	24	24	24
Max. 10/100/1000BASE-T	4	4	4	4	4
Max. 100BASE-FX	18	18	24	24	24
Max. 100BASE-SFP	-	-	24	24	24
Max. 1000BASE-SX/LX/BX	4	4	4	4	4
Max. 1000BASE-SFP	4	4	4	4	4
Max. 10 Gigabit SFP+	-	-	-	-	-
PoE Ports	-	-	-	-	-
PoE Power Budget	-	-	-	-	-
RS-232 Console Port	√	√	√	√	√
Alarm Contact	√	√	-	-	-
Performance					
MAC Address Table Size	8192	8192	8192	8192	8192
Packet Buffer Memory (bits)	3M	3M	3M	3M	3M
Jumbo Frame (bytes)	-	-	-	-	-
Mechanical					
Casing	Metal	Metal	Metal	Metal	Metal
Installation*	R	R	R	R	R
Dimensions (in) (W x D x H)	Single Power: 17.4 x 13.5 x 1.7 Dual Power: 17.4 x 15.9 x 1.7	Single Power: 17.4 x 13.5 x 1.7 Dual Power: 17.4 x 15.9 x 1.7	Single Power: 17.4 x 11.2 x 1.7 Dual Power: 17.4 x 14.8 x 1.7	Single Power: 17.4 x 13.5 x 1.7 Dual Power: 17.4 x 14.8 x 1.7	Single Power: 17.4 x 9.8 x 1.7 Dual Power: 17.4 x 14.8 x 1.7
Power Input					
No. of Power Inputs	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2
110 - 240VAC	√	√	√	√	√
Terminal Block	±48VDC, 88 - 370VDC	±48VDC, 88 - 370VDC	±48VDC, 88 - 370VDC	±48VDC, 88 - 370VDC	±48VDC, 88 - 370VDC
DC Jack	-	-	-	-	-
AC to DC Adapter	-	-	-	-	-
Operating Temperature					
-10 to 60°C (14 to 140°F)	-	√	-	√	-
-40 to 75°C (-40 to 167°F)	√	-	√	-	√
Network Redundancy					
Alpha-Ring / Alpha-Chain	√	√	√	√	√
STP / RSTP / MSTP	√	√	√	√	√
Network Management & Control					
Layer 2	√	√	√	√	√
Layer 3 Routing	-	-	-	-	-
Regulatory Approvals					
CE / FCC / VCCI	√	√	√	√	√
ISA 12.12.01	-	-	-	-	-
IEC 61850-3 / IEEE 1613	√	√	√	√	√
EN 50155 / EN 50121-4	√	√	√	√	-
UL 508 / UL 61010	-	-	-	-	-
UL 60950 / UL 62368	-	-	-	-	-
NEMA TS2	√	√	√	√	√

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Hardened & Industrial Managed Ethernet Switches



	EX83000	EX73000	EX63000	EX71000	EX61000A	EX70900
Interface						
Max. Total Ports	18	18	18	10	10	8
Max. 10/100BASE-TX	16	16	16	8	8	-
Max. 10/100/1000BASE-T	2	2	2	2	2	8
Max. 100BASE-FX	4	-	4	4	4	-
Max. 100BASE-SFP	4	-	-	4	4	-
Max. 1000BASE-SX/LX/BX	2	2	2	2	2	2
Max. 1000BASE-SFP	2	-	-	2	2	2
Max. 10 Gigabit SFP+	-	-	-	-	-	-
PoE Ports	-	-	-	-	-	-
PoE Power Budget	-	-	-	-	-	-
RS-232 Console Port	√	√	√	√	√	√
Alarm Contact	√	√	-	√	√	√
Performance						
MAC Address Table Size	8192	16K	16K	16K	16K	4096
Packet Buffer Memory (bits)	2M	12M	12M	12M	12M	1.5M
Jumbo Frame (bytes)	-	-	-	-	-	9720
Mechanical						
Casing	Aluminum	Aluminum	Metal	Aluminum	Metal	Aluminum
Installation*	D, P	D, P	D, P, R	D, P, R	D, P, R	D, P
Dimensions (in) (W x D x H)	3.3 x 4.9 x 5.7	2.6 x 4.9 x 1.8	2.3 x 4.9 x 1.8	2.4 x 4.9 x 5.7	2.1 x 4.9 x 5.7	2.6 x 4.9 x 5.7
Power Input						
No. of Power Inputs	3	2	2	2	2	3
110 - 240VAC	-	-	-	-	-	-
Terminal Block	12 - 48VDC					
DC Jack	12VDC	-	-	-	-	12VDC
AC to DC Adapter	-	-	-	-	-	-
Operating Temperature						
-10 to 60°C (14 to 140°F)	-	-	√	-	√	-
-40 to 75°C (-40 to 167°F)	√	√	-	√	-	√
Network Redundancy						
Alpha-Ring / Alpha-Chain	√	√	√	√	√	Alpha-Ring
STP / RSTP / MSTP	√	√	√	√	√	√
Regulatory Approvals						
CE / FCC / VCCI	√	√	√	√	√	√
ISA 12.12.01	-	√	-	-	-	-
IEC 61850-3 / IEEE 1613	√	-	-	-	-	√
EN 50155 / EN 50121-4	EN 50121-4	-	-	EN 50121-4	EN 50121-4	EN 50121-4
UL 508 / UL 61010	-	UL 61010	UL 61010	UL 61010	UL 61010	UL 508
UL 60950 / UL 62368	-	-	-	-	-	-
NEMA TS2	√	√	√	√	√	√

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Hardened & Industrial Unmanaged Ethernet Switches



Model Name	EX39924	EX42900	EX32900	EX41922
Interface				
Max. Total Ports	24	8	8	4
Max. 10/100BASE-TX	-	-	-	-
Max. 10/100/1000BASE-T	24	5 / 8	5 / 8	2
Max. 100BASE-FX	-	-	-	-
Max. 100BASE-SFP	-	-	-	2
Max. 1000BASE-SX/LX/BX	-	1	1	-
Max. 1000BASE-SFP	4 (Combo) / 16 (Combo)	-	-	2
PoE Ports	-	-	-	-
PoE Power Budget	-	-	-	-
RS-232 Console Port	-	-	-	-
Alarm Contact	-	✓	- / ✓	✓
Performance				
MAC Address Table Size	8192	8192 / 4096	8192 / 4096	8192
Packet Buffer Memory (bits)	512K	1M / 192K	1M / 192K	1M
Jumbo Frame (bytes)	16379	10K / 9720	10K / 9720	10K
Mechanical				
Casing	Metal	Metal	Plastic	Metal
Installation*	R	D	D	D
Dimensions (in) (W x D x H)	17.3 x 8.3 x 1.7	1.2 x 3 x 4.5 1.2 x 3.9 x 5.9	1 x 3 x 4.5 1.4 x 3.4 x 5.9	1.4 x 3.5 x 3.9
Power Input				
No. of Power Inputs	1	1 / 2	1 / 2	2
110 - 240VAC	✓	-	-	-
Terminal Block	-	12 - 48VDC	12 - 48VDC	12 - 48VDC
DC Jack	-	-	-	-
AC to DC Adapter	-	-	-	-
Operating Temperature				
-10 to 60°C (14 to 140°F)	✓	-	✓	-
-40 to 75°C (-40 to 167°F)	-	✓	-	✓
Network Redundancy				
Alpha-Ring / Alpha-Chain	-	-	-	-
STP / RSTP / MSTP	-	-	-	-
Network Management & Control				
Layer 2	-	-	-	-
Layer 3 Routing	-	-	-	-
Regulatory Approvals				
CE / FCC / VCCI	✓	✓	✓	✓
ISA 12.12.01	-	(EX42908 / EX42917)	-	-
ATEX	-	✓	✓	-
IEC 61850-3 / IEEE 1613	-	-	-	-
EN 50155 / EN 50121-4	-	-	-	-
UL 508 / UL 61010	-	-	-	UL 61010
UL 60950 / UL 62368	-	✓	UL 60950 (EX32905 / EX32914)	-

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Hardened & Industrial Unmanaged Ethernet Switches



	EX95000	EX33000	EX94000	EX43000
Model Name				
Interface				
Max. Total Ports	16	16	8	8
Max. 10/100BASE-TX	16	16	8	8
Max. 10/100/1000BASE-T	-	-	-	-
Max. 100BASE-FX	2	2	2	2
Max. 100BASE-SFP	-	-	2	2
Max. 1000BASE-SX/LX/BX	-	-	-	-
Max. 1000BASE-SFP	-	-	-	-
PoE Ports	-	-	-	-
PoE Power Budget	-	-	-	-
RS-232 Console Port	-	-	-	-
Alarm Contact	✓	✓	✓	✓
Performance				
MAC Address Table Size	4096	4096	1K	1K
Packet Buffer Memory (bits)	1.625M	1.625M	448K	448K
Jumbo Frame (bytes)	-	-	-	-
Mechanical				
Casing	Aluminum	Metal	Aluminum	Metal
Installation*	D, P, R	D, P, R	D, P	D, P
Dimensions (in) (W x D x H)	3 x 4.3 x 5.3	2.7 x 4.3 x 5.3	2 x 4.3 x 5.3	1.7 x 4.3 x 5.3
Power Input				
No. of Power Inputs	3	3	2	2
110 - 240VAC	-	-	-	-
Terminal Block	12 - 48VDC	12 - 48VDC	12 - 48VDC	12 - 48VDC
DC Jack	12VDC	12VDC	-	-
AC to DC Adapter	-	-	-	-
Operating Temperature				
-10 to 60°C (14 to 140°F)	-	✓	-	-20 to 60°C (-4 to 140°F)
-40 to 75°C (-40 to 167°F)	✓	-	✓	-
Network Redundancy				
Alpha-Ring / Alpha-Chain	-	-	-	-
STP / RSTP / MSTP	-	-	-	-
Network Management & Control				
Layer 2	-	-	-	-
Layer 3 Routing	-	-	-	-
Regulatory Approvals				
CE / FCC / VCCI	✓	✓	✓	✓
ISA 12.12.01	-	-	✓	-
ATEX	-	-	✓	✓
IEC 61850-3 / IEEE 1613	-	-	-	-
EN 50155 / EN 50121-4	-	-	-	-
UL 508 / UL 61010	UL 508	UL 508	-	-
UL 60950 / UL 62368	-	-	UL 60950	UL 60950

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Hardened & Industrial Unmanaged Ethernet Switches

IEC 61850-3
EN 50121-4



Model Name	EX47000	EX42008	EX32008	EX42005
Interface				
Max. Total Ports	8	8	8	5
Max. 10/100BASE-TX	8	8	8	5
Max. 10/100/1000BASE-T	-	-	-	-
Max. 100BASE-FX	6	1	1	1
Max. 100BASE-SFP	-	-	-	-
Max. 1000BASE-SX/LX/BX	-	-	-	-
Max. 1000BASE-SFP	-	-	-	-
PoE Ports	-	-	-	-
PoE Power Budget	-	-	-	-
RS-232 Console Port	-	-	-	-
Alarm Contact	✓	✓	✓	✓
Performance				
MAC Address Table Size	2048	1024	1K	1K
Packet Buffer Memory (bits)	448K	448K	448K	448K
Jumbo Frame (bytes)	-	-	-	-
Mechanical				
Casing	Aluminum	Aluminum	Plastic	Plastic
Installation*	D, P	D, P, R	D	D
Dimensions (in) (W x D x H)	2.4 x 4.9 x 5.7	1.2 x 3.9 x 5.9	1.4 x 3.4 x 5.9	1 x 2.8 x 4.3
Power Input				
No. of Power Inputs	3	2	2	1
110 - 240VAC	-	-	-	-
Terminal Block	12 - 48VDC	12 - 48VDC	12 - 48VDC	12 - 48VDC
DC Jack	12VDC	-	-	-
AC to DC Adapter	-	-	-	-
Operating Temperature				
-10 to 60°C (14 to 140°F)	-	-	✓	✓
-40 to 75°C (-40 to 167°F)	✓	✓	-	-
Network Redundancy				
Alpha-Ring / Alpha-Chain	-	-	-	-
STP / RSTP / MSTP	-	-	-	-
Network Management & Control				
Layer 2	-	-	-	-
Layer 3 Routing	-	-	-	-
Regulatory Approvals				
CE / FCC / VCCI	✓	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-	-
IEC 61850-3 / IEEE 1613	✓	-	-	-
EN 50155 / EN 50121-4	EN 50121-4	-	-	-
UL 508 / UL 61010	-	-	-	-
UL 60950 / UL 62368	-	✓	✓	✓

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Commercial Ethernet Switches



Model Name	EX25611	EX16926	EX16916	EX16900
Interface				
Max. Total Ports	28	26	16	8
Max. 10/100BASE-TX	-	-	-	-
Max. 10/100/1000BASE-T	24	24	16	5 / 8
Max. 100BASE-FX	-	-	-	-
Max. 100BASE-SFP	-	-	-	-
Max. 1000BASE-SX/LX/BX	-	-	-	1
Max. 1000BASE-SFP	4 (Combo)	2	-	1
Max. 10 Gigabit SFP+	4	-	-	-
PoE Ports	-	-	-	-
PoE Power Budget	-	-	-	-
RS-232 Console Port	✓	-	-	-
Alarm Contact	-	-	-	-
Performance				
MAC Address Table Size	32K	4K	8K	2048 / 4096
Packet Buffer Memory (bits)	256M	4.1M	256K	1M / 192K
Jumbo Frame (bytes)	-	10K	9K	9K / 9720
Mechanical				
Casing	Metal	Metal	Metal	Metal
Installation*	R	R	R, W	Desktop
Dimensions (in) (W x D x H)	17.4 x 11.8 x 1.7	17.4 x 5.2 x 1.7	8.5 x 5.2 x 1.7	6.3 x 3.2 x 1.1
Power Input				
No. of Power Inputs	1	1	1	1
110 - 240VAC	✓	✓	✓	-
Terminal Block	-	-	-	-
DC Jack	-	-	-	5VDC
AC to DC Adapter	-	-	-	✓
Operating Temperature				
0 to 45°C (32 to 113°F)	0 to 40°C (32 to 104°F)	0 to 50°C (32 to 122°F)	0 to 50°C (32 to 122°F)	✓
-10 to 60°C (14 to 140°F)	-	-	-	-
Network Redundancy				
Alpha-Ring / Alpha-Chain	-	-	-	-
STP / RSTP / MSTP	✓	-	-	-
Network Management & Control				
Layer 2	✓	-	-	-
Web-Smart	-	-	-	-
Regulatory Approvals				
CE / FCC / VCCI	✓	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-	-
IEC 61850-3 / IEEE 1613	-	-	-	-
EN 50121-4	-	-	-	-
UL 60950	-	-	-	✓

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Managed Ethernet PoE Switches



60W PoE
VRP
RIP v1/v2



60W PoE

Model Name	EX78900	EX76000	EX75000	EX78162	EX78000
Interface					
Max. Total Ports	16	18	28	18	12
Max. 10/100BASE-TX	-	16	24	16	8
Max. 10/100/1000BASE-T	12	-	-	-	2
Max. 100BASE-FX	-	-	-	-	4
Max. 100BASE-SFP	-	-	-	-	2
Max. 1000BASE-SX/LX/BX	4	2	-	-	2
Max. 1000BASE-SFP	4	-	4	2	2
Max. 10 Gigabit SFP+	-	-	-	-	-
PoE Ports	8 (60W)	16 (30W)	24 (30W)	16 (30W)	8 (60W)
PoE Power Budget	240W	480W	420W	240W	240W
RS-232 Console Port	✓	✓	✓	✓	✓
Alarm Contact	✓	✓	✓	✓	✓
Performance					
MAC Address Table Size	16K	8192	8192	8192	16K
Packet Buffer Memory (bits)	12M	2M	3M	2M	12M
Jumbo Frame (bytes)	9216	-	-	-	-
Mechanical					
Casing	Aluminum	Metal	Metal	Aluminum	Aluminum
Installation*	D, P	R	R	D, P	D, P
Dimensions (in) (W x D x H)	2.8 x 5.5 x 6.7	17.4 x 8.1 x 1.7	17.4 x 13.5 x 1.7	2.8 x 5.5 x 6.7	2.8 x 5.5 x 6.7
Power Input					
No. of Power Inputs	2	2	2	2	2
110 - 240VAC	-	-	-	-	-
Terminal Block	52 - 57VDC	52 - 57VDC	52 - 57VDC	52 - 57VDC	52 - 57VDC
DC Jack	-	-	-	-	-
AC to DC Adapter	-	-	-	-	-
Operating Temperature					
-10 to 60°C (14 to 140°F)	-	-	-	-	-
-40 to 75°C (-40 to 167°F)	✓	✓	✓	✓	✓
Network Redundancy					
Alpha-Ring / Alpha-Chain	✓	✓	✓	✓	✓
STP / RSTP / MSTP	✓	✓	✓	✓	✓
Network Management & Control					
Layer 2	-	✓	✓	✓	✓
Layer 3 Routing	✓	-	-	-	-
Regulatory Approvals					
CE / FCC / VCCI	✓	✓	✓	✓	✓
ISA 12.12.01	-	-	-	-	-
IEC 61850-3 / IEEE 1613	-	-	-	-	-
EN 50155 / EN 50121-4	-	-	-	-	-
UL 508 / UL 61010	UL 61010	UL 508	-	-	UL 61010
UL 60950 / UL 62368	-	-	-	-	-
NEMA TS2	-	-	-	-	✓

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Ethernet Switches

PoE Solutions

Media Converters

Ethernet Extenders

Wireless

Accessories

Managed Ethernet PoE Switches



Model Name	EX46100	EX48000	EX38000	EX26262F	EX24402
Interface					
Max. Total Ports	8	5	5	26	18
Max. 10/100BASE-TX	8	5	5	-	16
Max. 10/100/1000BASE-T	-	-	-	24	2
Max. 100BASE-FX	2	1	1	-	-
Max. 100BASE-SFP	-	-	-	-	-
Max. 1000BASE-SX/LX/BX	-	-	-	-	-
Max. 1000BASE-SFP	-	-	-	2 (Combo)	2
Max. 10 Gigabit SFP+	-	-	-	-	-
PoE Ports	4 (30W)	4 (30W)	4 (30W)	24 (30W)	16 (15.4W)
PoE Power Budget	120W	120W	120W	370W	195W
RS-232 Console Port	-	-	-	-	✓
Alarm Contact	✓	✓	✓	-	✓
Performance					
MAC Address Table Size	1024	1024	1024	8192	8192
Packet Buffer Memory (bits)	1M	512K	512K	512K	2M
Jumbo Frame (bytes)	-	-	-	9216	-
Mechanical					
Casing	Aluminum	Aluminum	Metal	Metal	Metal
Installation*	D, P, R	Desktop, W, D	Desktop, W, D	R	R
Dimensions (in) (W x D x H)	2.7 x 5.3 x 4.3	7.8 x 5.3 x 1.4	7.8 x 5.3 x 1.4	17.4 x 8.3 x 1.7	17.5 x 11.2 x 1.7
Power Input					
No. of Power Inputs	3	3	3	1	1
110 - 240VAC	-	-	-	✓	✓
Terminal Block	47 - 57VDC	47 - 57VDC	47- 57VDC	-	-
DC Jack	47 - 57VDC	47 - 57VDC	47- 57VDC	-	-
AC to DC Adapter	-	-	-	-	-
Operating Temperature					
-10 to 60°C (14 to 140°F)	-	-	✓	✓	✓
-40 to 75°C (-40 to 167°F)	✓	✓	-	-	-
Network Redundancy					
Alpha-Ring / Alpha-Chain	-	-	-	-	-
STP / RSTP / MSTP	-	-	-	✓	-
Network Management & Control					
Layer 2	System, IP Configuration, VLAN, QoS, Web Management		-	✓	✓
Layer 3 Routing			-	-	-
Regulatory Approvals					
CE / FCC / VCCI	✓	✓	✓	✓	✓
ISA 12.12.01	-	-	-	-	-
IEC 61850-3 / IEEE 1613	-	-	-	-	-
EN 50155 / EN 50121-4	-	-	-	-	-
UL 508 / UL 61010	-	-	-	-	-
UL 60950 / UL 62368	-	-	-	UL 60950	-

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Managed Ethernet PoE Switches



Model Name	EX17242	EX17162	EX17016	EX17008	EX17082	EX17908
Interface						
Max. Total Ports	26	18	16	8	10	8
Max. 10/100BASE-TX	24	16	16	8	8	-
Max. 10/100/1000BASE-T	2	2	-	-	2	8
Max. 100BASE-FX	-	-	-	-	-	-
Max. 100BASE-SFP	-	-	-	-	-	-
Max. 1000BASE-SX/LX/BX	-	-	-	-	-	-
Max. 1000BASE-SFP	2 (Combo)	2 (Combo)	-	-	2 (Combo)	-
Max. 10 Gigabit SFP+	-	-	-	-	-	-
PoE Ports	24 (30W)	16 (30W)	16 (15.4W)	8 (30W)	8 (30W)	8 (30W)
PoE Power Budget	369.6W	246.4W	240W	120W	240W	240W
RS-232 Console Port	-	-	-	-	-	-
Alarm Contact	-	-	-	-	-	-
Performance						
MAC Address Table Size	4096	4096	4096	4096	4096	8192
Packet Buffer Memory (bits)	2.75M	2.75M	1.625M	1.625M	2.75M	2M
Jumbo Frame (bytes)	-	-	-	-	-	-
Mechanical						
Casing	Metal	Metal	Metal	Metal	Metal	Metal
Installation*	R	R	R	Desktop	R	R
Dimensions (in) (W x D x H)	17.3 x 13 x 1.7	17.3 x 13 x 1.7	17.3 x 13 x 1.7	10.5 x 6.3 x 1.7	17.3 x 8.7 x 1.7	10.5 x 6.3 x 1.7
Power Input						
No. of Power Inputs	1	1	1	1	1	1
110 - 240VAC	✓	✓	✓	✓	✓	✓
Terminal Block	-	-	-	-	-	-
DC Jack	-	-	-	-	-	-
AC to DC Adapter	-	-	-	-	-	-
Operating Temperature						
0 to 45°C (32 to 113°F)	✓	✓	✓	✓	✓	0 to 40°C (32 to 104°F)
-10 to 60°C (14 to 140°F)	-	-	-	-	-	-
Network Redundancy						
Alpha-Ring / Alpha-Chain	-	-	-	-	-	-
STP / RSTP / MSTP	-	-	-	-	-	-
Network Management & Control						
Layer 2	-	-	-	-	-	-
Web-Smart	✓	✓	✓	✓	✓	✓
Regulatory Approvals						
CE / FCC / VCCI	✓	✓	✓	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-	-	-	-
IEC 61850-3 / IEEE 1613	-	-	-	-	-	-
EN 50121-4	-	-	-	-	-	-
UL 60950	✓	✓	✓	✓	✓	-

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Unmanaged Ethernet PoE Switches



Model Name	EX46900A	EX45900	EX41922-T	EX45000
Interface				
Max. Total Ports	10	6	4	8
Max. 10/100BASE-TX	-	-	-	8
Max. 10/100/1000BASE-T	8	5	2	-
Max. 100BASE-FX	-	-	-	2
Max. 100BASE-SFP	-	-	2	-
Max. 1000BASE-SX/LX/BX	2	1	-	-
Max. 1000BASE-SFP	2	1	2	-
PoE Ports	8 (30W)	4 (30W)	2 (30W)	4 (15.4W)
PoE Power Budget	120W	120W	60W	61.6W
RS-232 Console Port	-	-	-	-
Alarm Contact	√	√	√	√
Performance				
MAC Address Table Size	8192	8192	8K	1024
Packet Buffer Memory (bits)	4M	1M	1M	1M
Jumbo Frame (bytes)	9.6K	10K	10K	-
Mechanical				
Casing	Aluminum	Metal	Metal	Aluminum
Installation*	D	D	D	D, P, R
Dimensions (in) (W x D x H)	2.6 x 4.9 x 5.7	1.2 x 3.9 x 5.9	1.4 x 3.5 x 3.9	2.7 x 4.3 x 5.3
Power Input				
No. of Power Inputs	2	2	2	2
110 - 240VAC	-	-	-	-
Terminal Block	18 - 57VDC	18 - 57VDC	52 - 57VDC	47- 57VDC
DC Jack	-	-	-	47- 57VDC
AC to DC Adapter	-	-	-	-
Operating Temperature				
-10 to 60°C (14 to 140°F)	-	-	-	-
-40 to 75°C (-40 to 167°F)	√	√	√	√
Network Redundancy				
Alpha-Ring / Alpha-Chain	-	-	-	-
STP / RSTP / MSTP	-	-	-	-
Network Management & Control				
Layer 2	-	-	-	-
Layer 3 Routing	-	-	-	-
Regulatory Approvals				
E Mark	√	-	-	-
CE / FCC / VCCI	√	√	√	√
ISA 12.12.01 / UL 1604	-	-	-	-
IEC 61850-3 / IEEE 1613	-	-	-	-
EN 50155 / EN 50121-4	-	-	-	-
UL 508 / UL 61010	UL 508	-	UL 61010	-
UL 60950 / UL 62368	-	√	-	-

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Unmanaged Ethernet PoE Switches

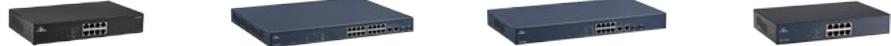
EN 50155



Model Name	EX34000	ER52000	EX48000A	EX42300
Interface				
Max. Total Ports	8	10	5	6
Max. 10/100BASE-TX	8	8 (M12)	5	4
Max. 10/100/1000BASE-T	-	2 (M12) Bypass	-	1
Max. 100BASE-FX	2	-	1	-
Max. 100BASE-SFP	-	-	-	-
Max. 1000BASE-SX/LX/BX	-	-	-	1
Max. 1000BASE-SFP	-	-	-	1
PoE Ports	4 (15.4W)	8 (30W)	4 (15.4W)	4 (30W)
PoE Power Budget	61.6W	120W	61.6W	120W
RS-232 Console Port	-	-	-	-
Alarm Contact	✓	-	✓	✓
Performance				
MAC Address Table Size	1024	8192	1024	8192
Packet Buffer Memory (bits)	1M	4M	512K	1M
Jumbo Frame (bytes)	-	9.6K	-	10K
Mechanical				
Casing	Metal	Aluminum	Metal	Metal
Installation*	D, P, R	W	Desktop, W, D	D
Dimensions (in) (W x D x H)	2.4 x 4.3 x 5.3	5.5 x 9 x 2.6	7.9 x 5.3 x 1.4	1.2 x 3.9 x 5.9
Power Input				
No. of Power Inputs	3	2	3	2
110 - 240VAC	-	-	-	-
Terminal Block	47- 57VDC	72-110VDC (M12)	47- 57VDC	24 / 48VDC
DC Jack	47- 57VDC	-	47- 57VDC	-
AC to DC Adapter	-	-	-	-
Operating Temperature				
-10 to 60°C (14 to 140°F)	✓	-	-	-
-40 to 75°C (-40 to 167°F)	-	✓	✓	✓
Network Redundancy				
Alpha-Ring / Alpha-Chain	-	-	-	-
STP / RSTP / MSTP	-	-	-	-
Network Management & Control				
Layer 2	-	-	-	-
Layer 3 Routing	-	-	-	-
Regulatory Approvals				
CE / FCC / VCCI	✓	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-	-
IEC 61850-3 / IEEE 1613	-	-	-	-
EN 50155 / EN 50121-4	-	EN 50155	-	-
UL 508 / UL 61010	-	-	-	-
UL 60950 / UL 62368	-	-	-	✓

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Unmanaged Ethernet PoE Switches



Model Name	EX17908A	EX17162A	EX17082A	EX17008A
Interface				
Max. Total Ports	8	18	10	8
Max. 10/100BASE-TX	-	16	8	8
Max. 10/100/1000BASE-T	8	2	2	-
Max. 100BASE-FX	-	-	-	-
Max. 100BASE-SFP	-	-	-	-
Max. 1000BASE-SX/LX/BX	-	-	-	-
Max. 1000BASE-SFP	-	2 (Combo)	-	-
PoE Ports	8 (30W)	16 (30W)	8 (30W)	8 (30W)
PoE Power Budget	240W	240W	240W	120W
RS-232 Console Port	-	-	-	-
Alarm Contact	-	-	-	-
Performance				
MAC Address Table Size	8192	4096	4096	4096
Packet Buffer Memory (bits)	2M	2.75M	2.75M	1.625M
Jumbo Frame (bytes)	-	-	-	-
Mechanical				
Casing	Metal	Metal	Metal	Metal
Installation*	Desktop	R	R	Desktop
Dimensions (in) (W x D x H)	10.5 x 6.3 x 1.7	17.3 x 13 x 1.7	17.3 x 8.9 x 1.7	10.5 x 6.3 x 1.7
Power Input				
No. of Power Inputs	1	1	1	1
110 - 240VAC	✓	✓	✓	✓
Terminal Block	-	-	-	-
DC Jack	-	-	-	-
AC to DC Adapter	-	-	-	-
Operating Temperature				
-10 to 60°C (14 to 140°F)	0 to 40°C (32 to 104°F)	✓	✓	✓
-40 to 75°C (-40 to 167°F)	-	-	-	-
Network Redundancy				
Alpha-Ring / Alpha-Chain	-	-	-	-
STP / RSTP / MSTP	-	-	-	-
Network Management & Control				
Layer 2	-	-	-	-
Layer 3 Routing	-	-	-	-
Regulatory Approvals				
CE / FCC / VCCI	✓	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-	-
IEC 61850-3 / IEEE 1613	-	-	-	-
EN 50155 / EN 50121-4	-	-	-	-
UL 508 / UL 61010	-	-	-	-
UL 60950 / UL 62368	-	UL 60950	UL 60950	UL 60950

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Hardened & Industrial PoE Media Converters



Model Name	EL2242	EL1032T
Interface		
Max. 100BASE-T	-	-
Max. 10/100BASE-TX	-	1
Max. 1000BASE-T	-	-
Max. 10/100/1000BASE-T	1	-
Max. 100BASE-FX/BX WDM	-	1
Max. 100BASE-SFP	1	-
Max. 1000BASE-SX/LX/BX	-	-
Max. 1000BASE-SFP	1	-
Max. PoE Ports	PSE (30W)	PSE (30W)
Web Management	-	-
Alarm Contact	✓	-
Mode of Operations		
Auto-negotiation, Auto-MDI/MDI-X	✓	✓
Flow Control	✓	✓
Store & Forward	✓	✓
Link Fault Pass Through	✓	✓
Mechanical		
Casing	Aluminum	Aluminum
Installation*	D	D, P
Dimensions (in) (W x D x H)	1.7 x 3.5 x 3.9	2.8 x 4.3 x 1.2
Power Input		
No. of Power Inputs	2	2
Terminal Block	48 - 57VDC	48 - 57VDC
DC Jack	-	48VDC
AC to DC Adapter	-	-
Operating Temperature		
-10 to 60°C (14 to 140°F)	-	✓
-40 to 75°C (-40 to 167°F)	✓	-
Regulatory Approvals		
CE / FCC / VCCI	✓	✓
ISA 12.12.01 / UL 1604	-	-
IEC 61850-3	-	-
EN 50121-4	-	-
UL 508 / UL 61010	-	-
UL/cUL 60950-1	✓	-

Long Reach Power over Link



Model Name	ED3538	ED3638	ED3238
Interface			
10/100BASE-TX	1	1	1
Max. 10/100/1000BASE-T	-	-	-
Max. 100/1000BASE-SFP	-	-	-
Max. PoE Ports	1 (30W)	1 (30W)	1 (15.4W)
Extension Interface			
RJ-11	1	-	-
Terminal Block	1	-	-
BNC	-	1	1
Mode of Operations			
Auto-negotiation, Auto-MDI/MDI-X	✓	✓	✓
Store & Forward	✓	✓	✓
Mechanical			
Casing	Aluminum	Aluminum	Aluminum
Installation*	D	D	C
Dimensions (in) (W x D x H)	2 x 4.3 x 5.3	2 x 4.3 x 5.3	46 x 98 x 25
Power Input			
No. of Power Inputs	3	3	1
Terminal Block	46 - 57VDC	46 - 57VDC	-
DC Jack	48VDC	48VDC	57VDC
AC to DC Adapter	-	-	✓
Operating Temperature			
-10 to 60°C (14 to 140°F)	-	-	-10 to 50°C (14 to 122°F)
-40 to 75°C (-40 to 167°F)	✓	✓	-
Management Function			
RS-232 Console Port	-	-	-
Web Management	-	-	-
Alpha-Ring / Alpha-Chain	-	-	-
Layer 2 Features**	-	✓	-
Regulatory Approvals			
CE / FCC / VCCI	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-
IEC 61850-3 / IEEE 1613	-	-	-
UL 508	-	-	-
UL/cUL 60950-1	✓	✓	✓
EN 50155 / EN 50121-4	-	-	-

* C: Chassis, D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

** Layer 2 Features include STP/RSTP/MSTP, VLAN, QoS, IGMP, GMRP, Bandwidth Rate Control, LACP, Port Trunking, Port Mirroring, Packet Filtering, IEEE 802.1xSecurity, RMON

Hardened & Industrial Media Converters

[ISA 12.12.01]



Model Name	EL9020	EL9100	EL9000	EL8020	EL8100	EL8000
Interface						
Max. 100BASE-T	-	-	-	-	-	-
Max. 10/100BASE-TX	-	-	-	-	-	-
Max. 1000BASE-T	-	-	1	-	-	1
Max. 10/100/1000BASE-T	1	1	-	1	1	-
Max. 100BASE-FX/BX WDM	-	-	-	-	-	-
Max. 100BASE-SFP	-	-	-	-	-	-
Max. 1000BASE-SX/LX/BX	-	1	1	-	1	1
Max. 1000BASE-SFP	1	-	-	1	-	1
Max. PoE Ports	-	-	-	-	-	-
Web Management	-	-	-	-	-	-
Alarm Contact	✓	✓	✓	✓	✓	✓
Mode of Operations						
Auto-negotiation, Auto-MDI/MDI-X	✓	✓	-	✓	✓	-
Flow Control	-	-	-	-	-	-
Store & Forward	-	-	-	-	-	-
Link Fault Pass Through	✓	✓	✓	✓	✓	✓
Mechanical						
Casing	Aluminum	Aluminum	Auminum	Metal	Metal	Metal
Installation*	D, P, R	D, P, R	D, P, R	D	D	D
Dimensions (in) (W x D x H)	2 x 4.3 x 5.3	2 x 4.3 x 5.3	2 x 4.3 x 5.3	1.4 x 3.5 x 3.9	1.4 x 3.5 x 3.9	1.4 x 3.5 x 3.9
Power Input						
No. of Power Inputs	2 / 1	2 / 1	2 / 1	2	2	2
Terminal Block	12 - 48VDC	12 - 48VDC	12 - 48VDC	12 - 48VDC	12 - 48VDC	12 - 48VDC
DC Jack	12VDC	12VDC	12VDC	-	-	-
AC to DC Adapter	-	-	-	-	-	-
Operating Temperature						
-10 to 60°C (14 to 140°F)	-	-	-	-	-	-
-40 to 75°C (-40 to 167°F)	✓	✓	✓	✓	✓	✓
Regulatory Approvals						
CE / FCC / VCCI	✓	✓	✓	✓	✓	✓
ISA 12.12.01 / UL 1604	✓	✓	✓	-	-	-
EN 50121-4	-	-	-	-	-	-
UL 508 / UL 61010	-	-	-	UL 61010	UL 61010	UL 61010
UL/cUL 60950-1	✓	✓	✓	-	-	-

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Hardened & Industrial Media Converters

[IEC 61850-3]
[EN 50121-4]

[ISA 12.12.01]

[IEC 61850-3]
[EN 50121-4]



Model Name	EL1142	EL900	EL1141	EX42011
Interface				
Max. 100BASE-T	-	-	-	-
Max. 10/100BASE-TX	2	1	1	1
Max. 1000BASE-T	-	-	-	-
Max. 10/100/1000BASE-T	-	-	-	-
Max. 100BASE-FX/BX WDM	2	1	1	1
Max. 100BASE-SFP	-	-	-	-
Max. 1000BASE-SX/LX/BX	-	-	-	-
Max. 1000BASE-SFP	-	-	-	-
Max. PoE Ports	-	-	-	-
Web Management	-	-	-	-
Alarm Contact	✓	✓	✓	-
Mode of Operations				
Auto-negotiation, Auto-MDI/MDI-X	✓	✓	✓	✓
Flow Control	✓	✓	✓	✓
Store & Forward	✓	✓	✓	✓
Link Fault Pass Through	✓	✓	✓	-
Mechanical				
Casing	Aluminum	Aluminum	Aluminum	Plastic
Installation*	D	D, P, R	D	D
Dimensions (in) (W x D x H)	2 x 4.3 x 5.3	2 x 4.3 x 5.3	2 x 4.3 x 5.3	1 x 4.3 x 2.8
Power Input				
No. of Power Inputs	2	2 / 1	3	1
Terminal Block	12 - 48VDC	10 - 48VDC	12 - 48VDC	12 - 48VDC
DC Jack	-	12VDC	12VDC	-
AC to DC Adapter	-	-	-	-
Operating Temperature				
-10 to 60°C (14 to 140°F)	-	-	-	✓
-40 to 75°C (-40 to 167°F)	✓	✓	✓	-
Regulatory Approvals				
CE / FCC / VCCI	✓	✓	✓	✓
ISA 12.12.01 / UL 1604	-	✓	-	-
IEC 61850-3	✓	-	✓	-
EN 50121-4	✓	-	✓	-
UL 508 / UL 61010	UL 61010	-	UL 508	-
UL/cUL 60950-1	-	✓	-	✓

* C: Chassis, D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

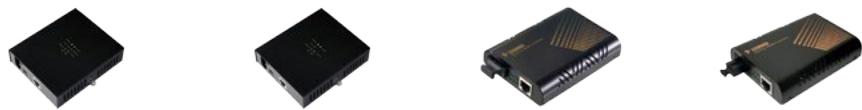
Commercial Media Converters



Model Name	EL2321	EL2211	EL2315	EM1000S EM2000S
Interface				
Max. 100BASE-T	-	-	-	-
Max. 10/100BASE-TX	-	-	-	-
Max. 1000BASE-T	-	-	-	-
Max. 10/100/1000BASE-T	1	1	1	-
Max. 100BASE-FX/BX WDM	1	-	-	-
Max. 100BASE-SFP	-	-	1	-
Max. 1000BASE-SX/LX/BX	1	1	-	2
Max. 1000BASE-SFP	-	-	1	-
Max. PoE Ports	-	-	-	-
Web Management	✓	-	-	-
Alarm Contact	-	-	-	-
Mode of Operations				
Auto-negotiation, Auto-MDI/MDI-X	✓	✓	✓	-
Flow Control	✓	✓	✓	-
Store & Forward	✓	✓	✓	-
Link Fault Pass Through	✓	✓	✓	-
Mechanical				
Casing	Aluminum	Aluminum	Aluminum	Aluminum
Installation*	C, W	C, W	C, W	C, W
Dimensions (in) (W x D x H)	3.2 x 4.3 x 0.9			
Rack Compatible	✓	✓	✓	✓
Power Input				
No. of Power Inputs	1	1	1	1
Terminal Block	-	-	-	-
DC Jack	12VDC	12VDC	12VDC	12VDC
AC to DC Adapter	✓	✓	✓	✓
Operating Temperature				
0 to 45°C (32 to 113°F)	✓	✓	✓	✓
-10 to 60°C (14 to 140°F)	-	-	-	-
Regulatory Approvals				
CE / FCC / VCCI	✓	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-	-
EN 50121-4	-	-	-	-
UL 508 / UL 61010	-	-	-	-
UL/cUL 60950-1	-	✓	-	-

* C: Chassis, D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Commercial Media Converters



Model Name	EL2326	EL2326L	EL100/EL110	EL200/EL210
Interface				
Max. 100BASE-T	-	-	1	1
Max. 10/100BASE-TX	-	-	1	1
Max. 1000BASE-T	-	-	-	-
Max. 10/100/1000BASE-T	1	1	-	-
Max. 100BASE-FX/BX WDM	-	-	1 FX	1 WDM
Max. 100BASE-SFP	-	-	-	-
Max. 1000BASE-SX/LX/BX	1 (Dual Rate)	1	-	-
Max. 1000BASE-SFP	-	-	-	-
Max. PoE Ports	-	-	-	-
Web Management	-	-	-	-
Alarm Contact	-	-	-	-
Mode of Operations				
Auto-negotiation, Auto-MDI/MDI-X	✓	✓	✓	✓
Flow Control	✓	✓	✓	✓
Store & Forward	✓	✓	✓	✓
Link Fault Pass Through	✓	✓	✓	✓
Mechanical				
Casing	Metal	Metal	Aluminum	Aluminum
Installation*	D	D	C, W	C, W
Dimensions (in) (W x D x H)	3.9 x 4.8 x 1.3	3.9 x 4.8 x 1.3	3.5 x 4.3 x 23.8	3.5 x 4.3 x 23.8
Rack Compatible	-	-	✓	✓
Power Input				
No. of Power Inputs	1	1	1	1
Terminal Block	-	-	-	-
DC Jack	12VDC	12VDC	12VDC	12VDC
AC to DC Adapter	-	-	✓	✓
Operating Temperature				
0 to 45°C (32 to 113°F)	-5 to 55°C (23 to 131°F)	-5 to 55°C (23 to 131°F)	✓	✓
-10 to 60°C (14 to 140°F)	-	-	-	-
Regulatory Approvals				
CE / FCC / VCCI	✓	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-	-
EN 50121-4	-	-	-	-
UL 508 / UL 61010	-	-	-	-
UL/cUL 60950-1	-	-	✓	✓

* C: Chassis, D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Commercial Media Converters



Model Name	EL1216	EM120	EL50
Interface			
Max. 100BASE-T	-	-	-
Max. 10/100BASE-TX	1	-	1
Max. 1000BASE-T	-	-	-
Max. 10/100/1000BASE-T	-	-	-
Max. 100BASE-FX/BX WDM	1	2	1
Max. 100BASE-SFP	-	-	-
Max. 1000BASE-SX/LX/BX	-	-	-
Max. 1000BASE-SFP	-	-	-
Max. PoE Ports	-	-	-
Web Management	-	-	-
Alarm Contact	-	-	-
Mode of Operations			
Auto-negotiation, Auto-MDI/MDI-X	✓	-	✓
Flow Control	✓	-	✓
Store & Forward	✓	-	✓
Link Fault Pass Through	✓	-	-
Mechanical			
Casing	Metal	Aluminum	Metal
Installation*	D	C, W	W
Dimensions (in) (W x D x H)	3.9 x 4.8 x 1.3	3.2 x 4.3 x 0.9	2.1 x 3.2 x 0.9
Rack Compatible	-	✓	✓
Power Input			
No. of Power Inputs	1	1	1
Terminal Block	-	-	-
DC Jack	12VDC	12VDC	12VDC
AC to DC Adapter	-	✓	✓
Operating Temperature			
0 to 45°C (32 to 113°F)	0 to 50°C (14 to 122°F)	✓	✓
-10 to 60°C (14 to 140°F)	-	-	-
Regulatory Approvals			
CE / FCC / VCCI	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-
EN 50121-4	-	-	-
UL 508	-	-	-
UL/cUL 60950-1	-	-	✓

* C: Chassis, D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Multiple Channel Chassis Media Converters

Ethernet Switches

PoE Solutions

Media Converters

Ethernet Extenders

Wireless

Accessories



Model Name	EMC1600	EMC1200R	EMC400
Interface			
Max. 100BASE-T	16	12	4
Max. 10/100BASE-TX	16	12	4
Max. 1000BASE-T	16	12	4
Max. 10/100/1000BASE-T	16	12	4
Max. 100BASE-FX/BX WDM	32	24	8
Max. 100BASE-SFP	16	12	4
Max. 1000BASE-SX/LX/BX	32	24	8
Max. 1000BASE-SFP	16	12	4
Max. PoE Ports	-	-	-
Web Management	-	-	-
Alarm Contact	-	-	-
Mode of Operations			
Auto-negotiation, Auto-MDI/MDI-X	✓	✓	✓
Flow Control	✓	✓	✓
Store & Forward	✓	✓	✓
Link Fault Pass Through	✓	✓	✓
Mechanical			
Casing	Metal	Metal	Metal
Installation*	R	R	D
Dimensions (in) (W x D x H)	17.3 x 10.9 x 3.5	17.3 x 9.6 x 1.8	5.1 x 6.5 x 3.6
Power Input			
No. of Power Inputs	2	2	2
100 - 240VAC	✓	✓	-
Terminal Block	±48VDC	±48VDC	12VDC
DC Jack	-	-	-
AC to DC Adapter	-	-	-
Operating Temperature			
0 to 45°C (32 to 113°F)	✓	✓	✓
-10 to 60°C (14 to 140°F)	-	-	-
Regulatory Approvals			
CE / FCC / VCCI	✓	✓	✓
ISA 12.12.01 / UL 1604	-	-	-
EN 50121-4	-	-	-
UL 508	-	-	-
UL/cUL 60950-1	✓	-	✓

* C: Chassis, D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Long Reach Ethernet over Copper Pairs



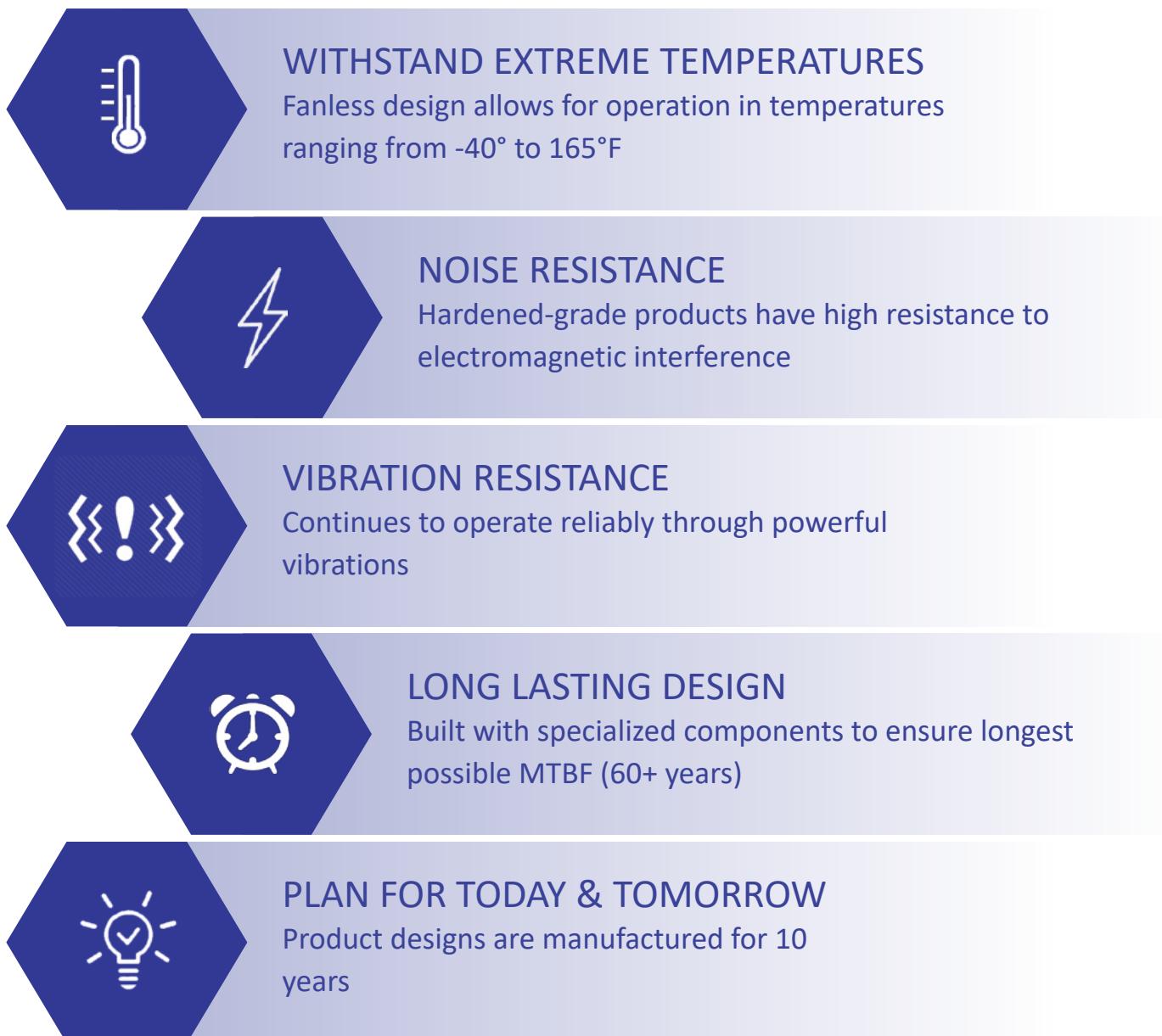
Model Name	ED3575	ED3541	ED3501
Interface			
10/100BASE-TX	6	1	1
Max. 10/100/1000BASE-T	2	-	-
Max. 100/1000BASE-SFP	2	-	-
Max. PoE Ports	-	-	-
Extension Interface			
RJ-11	2	1	1
Terminal Block	2	1	1
Mode of Operations			
Auto-negotiation, Auto-MDI/MDI-X	✓	✓	✓
Store & Forward	✓	✓	✓
Mechanical			
Casing	Aluminum	Aluminum	Aluminum
Installation*	D	D	C, D, W
Dimensions (in) (W x D x H)	2.9 x 4.9 x 5.7	1.7 x 7.5 x 3.9	3.5 x 4.3 x 0.9
Power Input			
No. of Power Inputs	2	2	1
Terminal Block	12 - 48VDC	12 - 48VDC	-
DC Jack	-	-	12VDC
AC to DC Adapter	-	-	✓
Operating Temperature			
-10 to 60°C (14 to 140°F)	-	-	✓
-40 to 75°C (-40 to 167°F)	✓	✓	-
Management Function			
RS-232 Console Port	✓	-	-
Web Management	✓	-	-
Alpha-Ring / Alpha-Chain	✓	-	-
Layer 2 Features**	✓	-	-
Regulatory Approvals			
CE / FCC / VCCI	✓	✓	✓
ISA 12.12.01 / UL 1604	-	✓	-
ATEX	-	✓	-
IEC 61850-3 / IEEE 1613	-	-	-
UL 508	-	-	-
UL/cUL 60950-1	✓	✓	✓
EN 50155 / EN 50121-4	-	-	-

* C: Chassis, D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

** Layer 2 Features include STP/RSTP/MSTP, VLAN, QoS, IGMP, GMRP, Bandwidth Rate Control, LACP, Port Trunking, Port Mirroring, Packet Filtering, IEEE 802.1xSecurity, RMON

EtherWAN's Hardened-Grade Difference

Since 1996, EtherWAN has been a leading manufacturer of hardened-grade ethernet products. What differentiates our hardened-grade products from our other ethernet switches? Ethernet switches are normally placed in indoor environments, such as server rooms or offices. However, EtherWAN's line of hardened grade products allow you to maintain the integrity of your networks in outdoor environments - from rooftops to warm, compact spaces like attics. EtherWAN's product development, engineering, manufacturing and quality assurance processes are structured to push the limits of stated specifications, resulting in products that continually exceed expectations.



Wifi Bridge/ Wifi Access Point



Model Name	EW75000 Series	EW 752000 Series
Technology		
Standards	IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3 ab 1000BASE-T, IEEE 802.11a/n/ac Wireless LAN	IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3 ab 1000BASE-T, IEEE 802.11a/n/ac Wireless LAN
Performance	Wireless transmission rate 5GHz: 11a:108Mbps, 11n 300Mbps, 11ac: 866Mbps Ethernet date rate: Up to 540Mbps (LAN to Wireless 11ac)	Wireless transmission rate 5GHz: 11a :108Mbps, 11n 300Mbps, 11ac: 866Mbps; 2.4GHz: 11b: 22Mbps, 11g: 108Mbps, 11n: 300Mbps Ethernet date rate: Up to 540Mbps (LAN to Wireless 11ac)
Wireless	Freq. Range: 5GHz 5150-5250MHz & 5725-5850MHz Channel Width: 5GHz: 10MHz, 20MHz, 40MHz, 80MHz Data Security: 256-bit AES-CCM	Frequency range: 5GHz: 5150-5250MHz and 5725-5850MHz; 2.4GHz: 2412-2462MHz Channel width: 5GHz: 10MHz, 20MHz, 40MHz, 80MHz; 2.4GHz: 5MHz, 10MHz, 20MHz, 40MHz Data security: 256-bit AES-CCM
Interface		
Ethernet Port	10/100/1000BASE-TX PoE	10/100/1000BASE-TX PoE
Power		
Input	48VDC PoE including Passive PoE, Telecom PoE, 802.3af and 802.3at	48VDC PoE including Passive PoE, Telecom PoE, 802.3af and 802.3at
Power Consumption	13W Max.	13W Max.
Environment		
Operating Temperature	-45 to 75°C (-40 to 167°F)	-45 to 75°C (-40 to 167°F)
Storing Temperature	-45 to 85°C (-49 to 185°F)	-45 to 85°C (-49 to 185°F)
Ambient Relative Humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Regulatory Approvals		
ISO	✓	✓
EMI	FCC Part 15B Class A, FCC Part 15C	FCC Part 15B Class A, FCC Part 15C
Environmental Test Compliance	IEC 60068-2-6 Fc (Vibration Resistance), FED STD 101C Method 5007.1 (Free fall w/ package)	IEC 60068-2-6 Fc (Vibration Resistance), FED STD 101C Method 5007.1 (Free fall w/ package)
Mechanical		
Installation*	P/W*	P/W*
Dimensions (in) (W x D x H)	EW75000-13: 10.6 x 10.5 x 3.8, EW75000-21: 14.6 x 14.6 x 3.6	EW75200-0804, EW75200-1304: 10.6 X 10.5 X 3.8 EW75200-2104: 14.6 X 14.6 X 3.6

*P: Panel Mounting, W: Wall Mounting

Surge Protectors

Ethernet Switches

PoE Solutions

Media Converters

Ethernet Extenders

Wireless

Accessories



Model Name	PD1041	PD3041
Interface		
Max. Continuous Operating Voltage Uc	≤3.3VDC	≤185VDC
Max. Continuous Operating Voltage Uc, PoE	≤3.3VDC (±60VDC / PoE+)	-
Nominal Discharge Surge Current In (8/20) µs (Core-Core)	100A	≤5KA
Nominal Discharge Surge Current In (8/20) µs (Core-Earth)	2KA (per signal pair)	≤5KA
Total Surge Current (8/20) µs	10KA	10KA
Nominal Pulse Current Ian (Core-Core)	≤40A, (10/700) µs	≤100A, (10/1000) µs
Nominal Pulse Current Ian (Core-Earth)	≤160A, (10/700) µs	≤100A, (10/1000) µs
Connector Input/Output	RJ-45 / RJ-45	RJ-11 / RJ-11 Terminal Block / Terminal Block
Mechanical		
Casing	Aluminum	Aluminum
Installation*	D	D
Dimensions (in) (W x D x H)	1.2 x 2.5 x 3.9	1.2 x 2.5 x 3.9
Operating Temperature		
-40 to 75°C (-40 to 167°F)	✓	✓
Regulatory Approvals		
CE / FCC / VCCI	✓	✓
UL 497B	✓	✓
EN / IEC 61643-21	✓	✓

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Power Adapters



Model Name	EXGS-120A-48	EX41-136044	EX41-136046	EX41-145044	EX41-145046
Output					
DC Voltage	48VDC	12VDC	12VDC	12VDC	12VDC
Current Range	0 - 2.5A	0 - 3A	0 - 3A	0 - 3.7A	0 - 3.7A
Rated Power	120W	36W	36W	45W	45W
Input					
90 - 264VAC	85 - 264VAC	✓	✓	✓	✓
Mechanical					
Casing	Plastic	Aluminum	Aluminum	Aluminum	Aluminum
Installation*	-	W	W	W	W
Operating Temperature					
-30 to 70°C (-22 to 158°F)	✓	-	-	-	-
-40 to 75°C (-40 to 167°F)	-	✓	✓	✓	✓
Regulatory Approvals					
CE / FCC / PSE	CE / FCC	✓	✓	CE / FCC	CE / FCC
UL 60950	✓	✓	✓	✓	✓
Efficiency Level: VI	-	-	-	✓	✓

* D: DIN-Rail Mounting, P: Panel Mounting, R: Rack Mounting, W: Wall Mounting

Network Interface Cards



Model Name	GE3100	EN400	EN301
Ethernet Interface			
Max. 10/100BASE-TX	-	-	-
Max. 100BASE-FX	-	1	1
Max. 100BASE-SFP	-	1	-
Max. 1000BASE-T	1	-	-
Max. 1000BASE-SX/LX	1	-	-
Max. 1000BASE-SFP	1	-	-
Bus Interface			
PCI Express	✓	✓	-
PCI	-	-	✓
Mode of Operations			
Auto-negotiation, Auto-MDI/MDI-X	✓	-	-
Flow Control	✓	✓	✓
Store & Forward	-	-	-
Mechanical			
Dimensions (in++) (L x W)	4.9 x 4.8	3.1 x 4.7 / 4.6 x 4.7	5.2 x 4.6 / 5.2 x 3.1
Management Function			
ACPI*	✓	✓	✓
Wake-on -LAN remote wake-up	✓	✓	-
IEEE 802.1Q VLAN	✓	✓	✓
IEEE 802.1P Layer 2 Priority Tagging	✓	✓	✓
NDIS5 Checksum Offload	✓	✓	✓
RFC1157 SNMP v1	✓	-	-
Preboot Execution Environment	✓	-	-
Cable Diagnostic Utility	✓ (Only TX model)	-	-
Jumbo Frame	✓ (Only TX model)	-	-
Operating Temperature			
0 to 45°C (32 to 113°F)	✓	✓	✓
Driver Support			
Windows	Windows Vista, Windows 2003, Windows XP, Windows 2000 and Windows 7/8	Microsoft Windows 98, Windows ME, Windows XP, Windows 2000, Windows 2003, Windows 2008, Windows Vista and Windows 7	Microsoft Windows 95 (including OSR2), Windows 98 (including SE), Windows ME, Windows 2000, Windows XP, Windows Vista (32bit/64bit), Windows NT 4.0 and Windows 7 (32bit/64bit)
Novell	-	Novell server driver (Support OS 6.x, 5.x), client for DOS (ODIdriver)	Novell Netware 3.11, 3.12, 4.x, 5.x, 6.0, Client 32
Unix	Linux 2.4/2.6/3.x	SCO Unix 5.0/6/5.0.7, SCO OpenServer 6, UnixWare 7.1.x and Linux kernel 2.6.x and 2.4.x (Support x86 and x64)	Linux Kernel 2.2.x/2.4.x/2.6.x, SCO UnixWare 7.x/Open Unix 8, SCO UNIX 5.0
Others	Mac OS, 10.4, 10.5, 10.6 and 10.7 (Intel-based)	MacOS 10.4/10.5 on Intel-based Mac computer, 10.6 on Intel-based Mac computer, FreeBSD 7.x/8.0	LAN Manager, LANtastic, PC-NFS, FreeBSD 3.2, 4.0, 4.11, 4.2, 5.x
Regulatory Approvals			
CE / FCC	Class B	Class B	Class B

* Advanced Configuration & Power Interface

SFP Fiber Transceivers



Spotlight

- All SFPs have been tested for optimum operating performance on EtherWAN switches
- Characteristics are in accordance with Telcordia Specification GR-468-CORE
- RoHS Compliant and Lead-free
- 5-year Warranty
- Eye Safety Designed to meet Laser Class 1, and compliant with EN 60825-1
- Compliant with Multi-Source Agreement (MSA) Small Form Factor Pluggable (SFP)
- EMC requirement meets FCC in the United States and CENELEC EN 55022 (CISPR 22) in Europe

Ordering Information

100BASE SFP Series*

Non-Hardened (Operating Temperature: 0 to 70°C/32 to 158°F)

Model Name	Distance	Cable Type	Connector Type	Wavelength	Link Budget**	Optical Output Power	Sensitivity
EXFE-R1S4-05H1	100m	-	TX	-	-	-	-
EX-0155TBP-LB5L	20Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1550nm	18dBm	-14 to -8dBm	-32dBm
EX-LM38-A3S-TC-N-B3	2Km	62.5/125µm/50/125µm, MM	Single LC	TX: 1310nm/RX: 1550nm	18dBm	-10 to 0dBm	-28dBm
EX-LM48-A3S-TC-N-B5	2Km	62.5/125µm/50/125µm, MM	Single LC	TX: 1550nm/RX: 1310nm	18dBm	-10 to 0dBm	-28dBm
EX-0155TBP-MB5L	20Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	18dBm	-14 to -8dBm	-32dBm
EX-0155TBP-LB5L	20Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	18dBm	-14 to -8dBm	-32dBm
EX-0155NSP-MB2L	2Km	62.5/125µm, MM	Duplex LC	1310nm	13dBm	-19 to -14dBm	-32dBm
EX-0155TSP-MB5L	15Km	9/125µm, SM	Duplex LC	1310nm	19dBm	-15 to -8dBm	-34dBm
EX-0155TSP-MB6L	40Km	9/125µm, SM	Duplex LC	1310nm	30dBm	-5 to 0dBm	-35dBm

Hardened (Operating Temperature: -40 to 85°C/-40 to 185°F)

Model Name	Distance	Cable Type	Connector Type	Wavelength	Link Budget**	Optical Output Power	Sensitivity
EX-0155TBP-MB5L-A	20Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	18dBm	-14 to -8dBm	-32dBm
EX-LM38-A3S-TI-N-B3	2Km	62.5/25µm/50/125µm, MM	Single LC	TX: 1310nm/RX: 1550nm	18dBm	-10 to 0dBm	-28dBm
EX-LM48-A3S-TI-N-B5	2Km	62.5/125µm/50/125µm, MM	Single LC	TX: 1550nm/RX: 1310nm	18dBm	-10 to 0dBm	-28dBm
EX-0155TBP-LB5L-A	20Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	18dBm	-14 to -8dBm	-32dBm
EX-0155TBP-MB6L-A	40Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	26dBm	-8 to -3dBm	-34dBm
EX-0155TBP-KB6L-A	40Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	26dBm	-8 to -3dBm	-34dBm
EX-0155TSP-MB6L-A	40Km	9/125µm, SM	Duplex LC	1310nm	29dBm	-5 to 0dBm	-34dBm
EX-0155TSP-MB5L-A	15Km	9/125µm, SM	Duplex LC	1310nm	19dBm	-15 to -8dBm	-34dBm
EX-0155NSP-MB2L-A	2Km	62.5/125µm, MM	Duplex LC	1310nm	13dBm	-19 to -14dBm	-32dBm

* More SFP options upon request.

** Link Budget data is based on pair of the same SFP modules.

Gigabit SFP Series*

Non-Hardened (Operating Temperature: 0 to 70°C/32 to 158°F)

Model Name	Distance	Cable Type	Connector Type	Wavelength	Link Budget**	Optical Output Power	Sensitivity
EX-LS48-C3U-TC-N51-CE (1510nm) (DDM)	80Km	9/125µm, SM	Single LC	TX: 1510nm/RX: 1570nm	24dBm	-2 to +3dBm	-26dBm
EX-LS48-C3U-TC-N57-CE (1570nm) (DDM)	80Km	9/125µm, SM	Single LC	TX: 1570nm/RX: 1510nm	24dBm	-2 to +3dBm	-26dBm
EX-1250TBP-MB1L S	550m	62.5/125µm/50/125µm, MM	Single LC	TX: 1310nm/RX: 1550nm	7dBm	-10 to -4dBm	-17dBm
EX-1250TBP-LB1L S	550m	62.5/125µm/50/125µm, MM	Single LC	TX: 1550nm/RX: 1310nm	7dBm	-10 to -4dBm	-17dBm
EX-LS38-C3L-TC-N-CE (DDM)	40Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	20dBm	-3 to +2dBm	-23dBm
EX-LS48-C3L-TC-N-CE (DDM)	40Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	20dBm	-3 to +2dBm	-23dBm
EX-LS38-C3U-TC-N-CE (DDM)	60Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	24dBm	0 to +5dBm	-24dBm
EX-LS48-C3U-TC-N-CE (DDM)	60Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	23dBm	-2 to +4dBm	-25dBm
EX-1250TBP-MB4L S	10Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	12dBm	-9 to -3dBm	-21dBm
EX-1250TBP-KB4L S	10Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	12dBm	-9 to -3dBm	-21dBm
EX-1250TBP-MB5L S	20Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	15dBm	-8 to -3dBm	-23dBm
EX-1250TBP-KB5L S	20Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	15dBm	-8 to -3dBm	-23dBm
EX-1250TSP-MB2L S	2Km	62.5/125µm, MM	Duplex LC	1310nm	13.5dBm	-9.5 to -3dBm	-23dBm
EX-1250TSP-MB4L S	10Km	9/125µm, SM	Duplex LC	1310nm	11.5dBm	-9.5 to -3dBm	-21dBm
EX-1250TSP-MB5L S	20Km	9/125µm, SM	Duplex LC	1310nm	15dBm	-9 to -3dBm	-24dBm
EX-LS38-C3L-TC-N-EB (DDM)	40Km	9/125µm, SM	Duplex LC	1310nm	20dBm	-3 to +2dBm	-23dBm
EX-LS48-C3U-TC-N-EB (DDM)	70Km	9/125µm, SM	Duplex LC	1550nm	23dBm	0 to +5dBm	-23dBm
EX-1250NSP-SB1L S	275m/550m	62.5/125µm/50/125µm, MM	Duplex LC	850nm	7.5dBm	-9.5 to -4dBm	-17dBm
SPPGIS90C (DDM)	90Km	9/125µm, SM	Duplex LC	1550nm	27dBm	0 to +5dBm	-27dBm

* More SFP options upon request.

** Link Budget data is based on pair of the same SFP modules.

Gigabit SFP Series*

Hardened (Operating Temperature: -40 to 85°C/-40 to 185°F)

Model Name	Distance	Cable Type	Connector Type	Wavelength	Link Budget **	Optical Output Power	Sensitivity
EXGT-R154-05H3	100m	TX	TX	-	-	-	-
EX-1250TBP-MB1L-A S	550m	62.5/125µm/50/125µm, MM	Single LC	TX: 1310nm/RX: 1550nm	7dBm	-10 to -4dBm	-17dBm
EX-1250TBP-LB1L-A S	550m	62.5/125µm/50/125µm, MM	Single LC	TX: 1550nm/RX: 1310nm	7dBm	-10 to -4dBm	-17dBm
EX-LM38-C3S-TI-N-CE (DDM)	550m	62.5/125µm, MM	Single LC	TX: 1310nm/RX: 1550nm	8dBm	-10 to +2dBm	-18dBm
EX-LM48-C3S-TI-N-CE (DDM)	550m	62.5/125µm, MM	Single LC	TX: 1550nm/RX: 1310nm	10dBm	-8 to 0dBm	-18dBm
EX-1250TBP-MB5L-A S	20Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	15dBm	-8 to -3dBm	-23dBm
EX-1250TBP-KB5L-A S	20Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	15dBm	-8 to -3dBm	-23dBm
SFPGYS20M (DDM)	20Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	15dBm	-8 to -2dBm	-23dBm
SFPGZS20M (DDM)	20Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	15dBm	-8 to -2dBm	-23dBm
EX-LS38-C3L-TI-N-CE (DDM)	40Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	20dBm	-3 to +2dBm	-23dBm
EX-LS48-C3L-TI-N-CE (DDM)	40Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	20dBm	-3 to +2dBm	-23dBm
EX-LS38-C3U-TI-N-CE (DDM)	60Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	24dBm	0 to +5dBm	-24dBm
EX-LS48-C3U-TI-N-CE (DDM)	60Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	23dBm	-2 to +4dBm	-25dBm
EX-1250TBP-MB4L-A S	10Km	9/125µm, SM	Single LC	TX: 1310nm/RX: 1550nm	12dBm	-9 to -3dBm	-21dBm
EX-1250TBP-KB4L-A S	10Km	9/125µm, SM	Single LC	TX: 1550nm/RX: 1310nm	12dBm	-9 to -3dBm	-21dBm
EX-1250TSP-MB2L-A S	2Km	62.5/125µm, MM	Duplex LC	1310nm	13.5dBm	-9.5 to -3dBm	-23dBm
EX-1250TSP-MB4L-A S	10Km	9/125µm, SM	Duplex LC	1310nm	11.5dBm	-9.5 to -3dBm	-21dBm
EX-1250NSP-SB1L-A S	275m/550m	62.5/125µm/50/125µm, MM	Duplex LC	850nm	7.5dBm	-9.5 to -4dBm	-17dBm
EX-1250TSP-MB5L-A S	20Km	9/125µm, SM	Duplex LC	1310nm	15dBm	-9 to -3dBm	-24dBm
EX-LS38-C3L-TI-N-EB (DDM)	40Km	9/125µm, SM	Duplex LC	1310nm	20dBm	-3 to +2dBm	-23dBm
EX-LS48-C3U-TI-N-EB (DDM)	70Km	9/125µm, SM	Duplex LC	1550nm	23dBm	0 to +5dBm	-23dBm

* More SFP options upon request.

** Link Budget data is based on pair of the same SFP modules.

10GBASE SFP Series*

Non-Hardened (Operating Temperature: 0 to 70°C/32 to 158°F)

Model Name	Distance	Cable Type	Connector Type	Wavelength	Link Budget **	Optical Output Power	Sensitivity
SFPTIM3AE (DDM)	300m	62.5/125µm/50/125µm, MM	Duplex LC	850nm	2.8dBm	-7.1 to -1dBm	-9.9dBm
SFPTIS10E (DDM)	10Km	9/125µm	Duplex LC	1310nm	8.4dBm	-6 to +0.5dBm	-14.4dBm

Hardened (Operating Temperature: -40 to 85°C/-40 to 185°F)

Model Name	Distance	Cable Type	Connector Type	Wavelength	Link Budget **	Optical Output Power	Sensitivity
SFPTIM3AM (DDM)	300m	62.5/125µm/50/125µm, MM	Duplex LC	850nm	2.8dBm	-7 to -1dBm	-9.9dBm
SFPTIS10M (DDM)	10Km	9/125µm	Duplex LC	1310nm	6.4dBm	-8 to +0.5dBm	-14.4dBm
SFPTIS20M (DDM)	20Km	9/125µm	Duplex LC	1310nm	9.4dBm	-5 to +1dBm	-14.4dBm

* More SFP options upon request.

** Link Budget data is based on pair of the same SFP modules.

Backup Tool



Value

- › Automatically restore switch configuration files
- › Quickly compare configuration data on switch and EB-232
- › Operation through an intuitive GUI

Ordering Information

EB-232	Configuration Backup and Restoration Tool for Managed Switches
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Ethernet Switches

TransRack



Value

- › Mount DIN-Rail devices inside a standard 19" rack or cabinet
- › Unique depth adjustment feature to fit any size of equipment
- › One standard 35mm (1.38") DIN-Rail track included

Features

- › Patented design
- › Heavy-duty cold-rolled steel
- › Adjustable in depth from 2" to 8.25"
- › Dimensions: 19" x 4.13" x 11.22" (W x H x D)

Ordering Information

TransRack	KR-DINRAILB
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PoE Solutions

Media Converters

Ethernet Extenders

Wireless

Patch Cables

EX-FCSCLCS02M



Fiber Cable SC to LC, 9/125µm, 10Gb, OS1, Single-Mode Duplex PVC - 2 meters

Accessories

EX-FCSTLCS02M



Fiber Cable ST to LC, 9/125µm, 10Gb, OS1, Single-Mode Duplex PVC - 2 meters

Mounting Kits

KR-BKEL900



19" Rack mounting kit (black)
For EL900, EL9000, EL9020, EL9100, EL1141 and EX94000 Series

KR-BK-43-400



19" Rack mounting kit (black)
For EX95000, EX33000, EX34000, EX45000 and EX46100 Series

KR-BK71000



19" Rack mounting kit (black)
For EX71000 and EX61000A Series

KR-BK7800040



19" Rack mounting kit (black)
For EX78000, EX78900 and EX73900 Series

KR-BK17



19" Rack mounting kit (black)
For EX17008, EX17008A, EX17908 and EX17908A Series

KP-AA96-480



Panel mounting kit
For EX33000, EX34000, EX43000, EX45000, EX46100, EX47000, EX61000A, EX63000, EX71000, EX73000, EX78000, EX78900, EX94000, EX95000, EL900, EL9000, EL9020, EL9100, EL1141 Series

KD-31003



DIN-Rail mounting kit
(Can be mounted using hardware version V3 and above with holes on the bottom cases)

KD-AAEL950



DIN-Rail mounting kit
For ED3541, EX41922-T, EL2242, EL8000, EL9100

Mounting Kits

Ethernet Switches

PoE Solutions

Media Converters

Ethernet Extenders

Wireless

Accessories

KR-BK779 NEW

19" rack offset mounting brackets (black)
For EX77964



KR-BKZDIN NEW

Z-shaped rack vertical mounting bracket for DIN-rail (black)
For EX78900, EX78000, EX73900



KD-BKZDIN2 NEW

Z-shaped rack vertical mounting bracket for DIN-rail (black)
For EX78900, EX78000, EX73900



Software Tools



eVue MONITORING UTILITY

Discover, maintain & upgrade EtherWAN managed products

USE: Easily access device settings

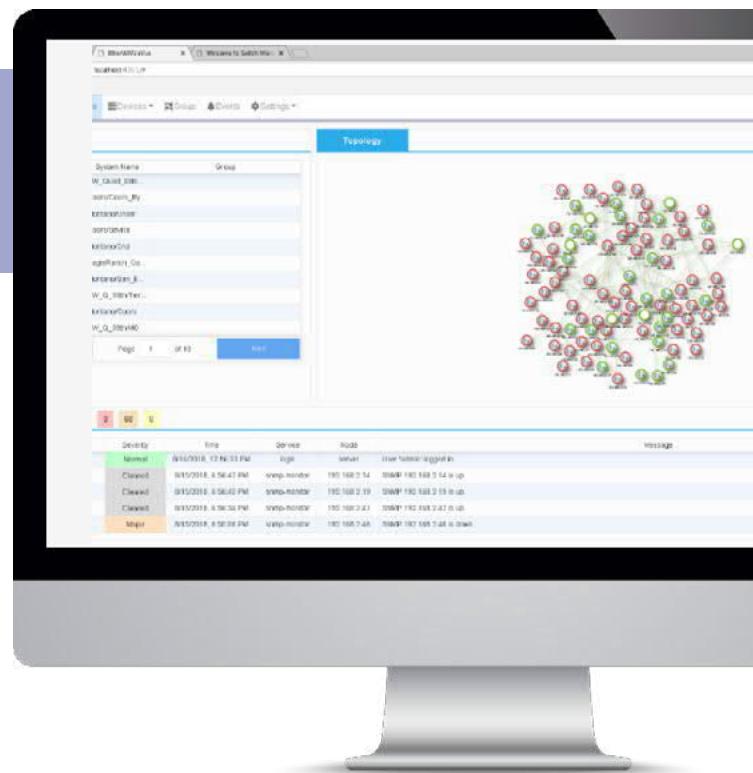
SETUP: Client-Server Application allows for client access via browser over any device

SEARCH: Search across one or more subnets across a router

NEW DEVICES: Detects newly installed devices

INTUITIVE: Drag and drop, group by profile

AUTOMATIC: Auto-checks firmware updates, supports scheduling



eElite UPDATE & CONFIGURATION TOOL

Easily configure switches and update firmware

SAVE TIME: Mass configure devices to quickly setup a new network

CONFIGURATION: Quickly configure your network switches from an easy-to-use interface

NO TFTP: Easily update firmware without TFTP





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