EtherWAN
When Connectivity is Crucial

PoE Solutions
Product Overview

SWITCHES | MEDIA CONVERTERS
EXTENDERS | ACCESSORIES |INJECTORS AND SPLITTERS

EtherWAN

Reliability when connectivity is crucial.

EtherWAN's PoE products are built to support the long-term health of your network and come in a wide variety of form factors. Designed to operate in a number of environmental conditions, they provide the right networking solution for urban infrastructure communication applications.

About EtherWAN

Founded in 1996 by NASA engineers, EtherWAN provides Ethernet connectivity solutions for Urban Infrastructure with a core focus on reliability in extreme environments. In-house product design, engineering, and manufacturing are structured to provide quality for crucial connectivity applications.

Why EtherWAN?

Our hardened-grade products are backed by a lifetime warranty and complimentary support. Register to stay up-to-date with product updates and minimize downtime through service and repairs.

US-based tech support provides guidance throughout the project life-cycle. Certified network engineers provide support both onsite and over the phone.

Training is available with industry-specific network and product-focused courses. Courses are offered online and in-person for easy accessibility.

Products are designed, tested and manufactured in-house to ensure the highest quality solutions for specific applications.

Reduce installation time and costs through flexible network solutions, whether installing new cabling or utilizing existing systems.

The Customer Experience Lab is a hub for showcasing network tech for ITS, IP Security and Water/Wastewater. Learn network best practices, train employees, and make educated buying decisions with hands-on access to mock traffic intersections, TMC, a variety of IP cameras, and more.

" 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***

Table of Contents

PoE Fundamentals

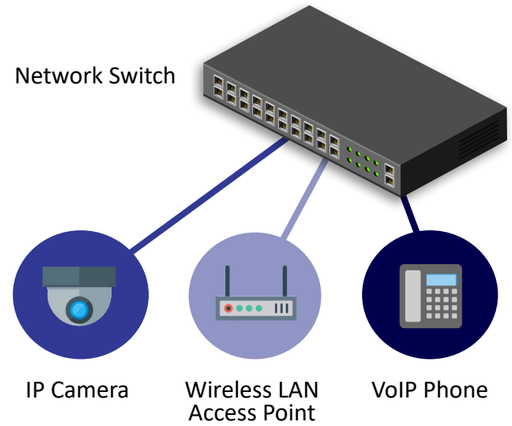
PoE Standards

Different networks call for different types of PoE. Refer to this quick reference guide to see what characterizes each of the four types.

Name	IEEE Standard	MAX power per port/ PSE	Power to PD (Powered device)	Energized number of pairs
PoE	(Type 1) 802.3**af**	15.4W	12.95W	2-pair
PoE+	(Type 2) 802.3**at**	30W	25.5W	2-pair
4PPoE	(Type 3) 802.3**bt**	60W	51W	4-pair
4PPoE	(Type 4) 802.3**bt**	100W	71.3W	4-pair

Power Sourcing Equipment (PSE) vs. Powered Device (PD)

PoE-capable devices can be either Power Sourcing Equipment (PSE) or Powered Devices (PD), or sometimes both. See what defines each type below.



Power Source Equipment (PSE) is the device that transmits power.

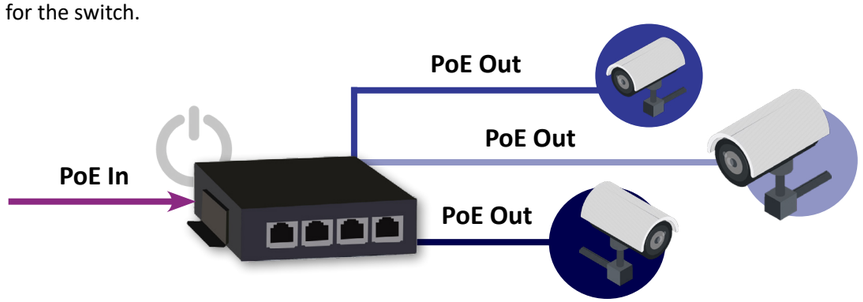
Powered Device (PD) is the device that is being powered.

Active PoE vs. Passive PoE

Active PoE	Passive PoE
• Negotiates the correct voltage between the switch and the PoE powered device • If voltage is too high, active PoE will regulate power to match the correct needed voltage • If voltage is too low, active PoE will not power on the PoE device	• Does not negotiate voltage between switch and PoE powered device • Consistent output regardless of PoE powered device • Passive PoE overvoltage can cause electrical damage to PoE devices

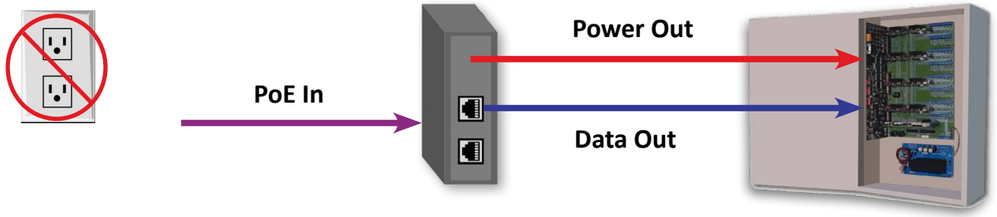
PoE Powered PoE Switch

A PoE Powered switch can be powered by another PoE switch or injector, essentially operating as a PoE repeater with addtional PoE ports available at the remote location. This can come in handy if there is no nearby local power source for the switch.



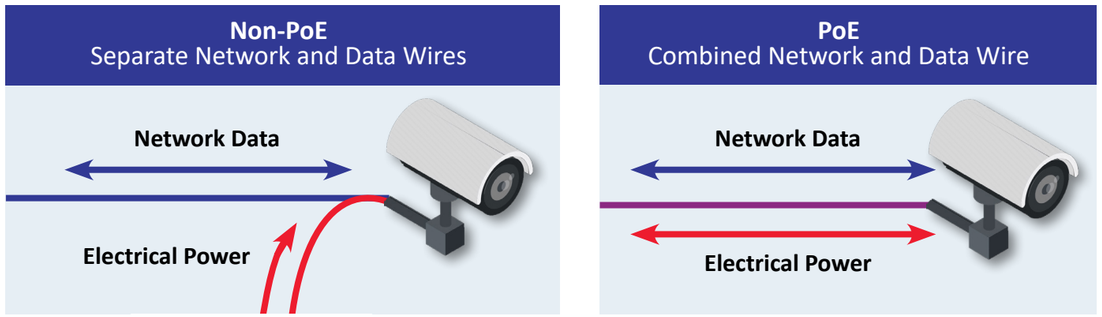
What is a PoE Splitter?

A PoE splitter is a power supply that's driven by PoE. PoE input is converted into a DC voltage output up to 72W. Multiple DC voltages are supported, making it ideal for powering various devices where there is no nearby local power source for the device. Upgrade your non-PoE devices to PoE!



Reduce the Number of Wires in the Network by 50%

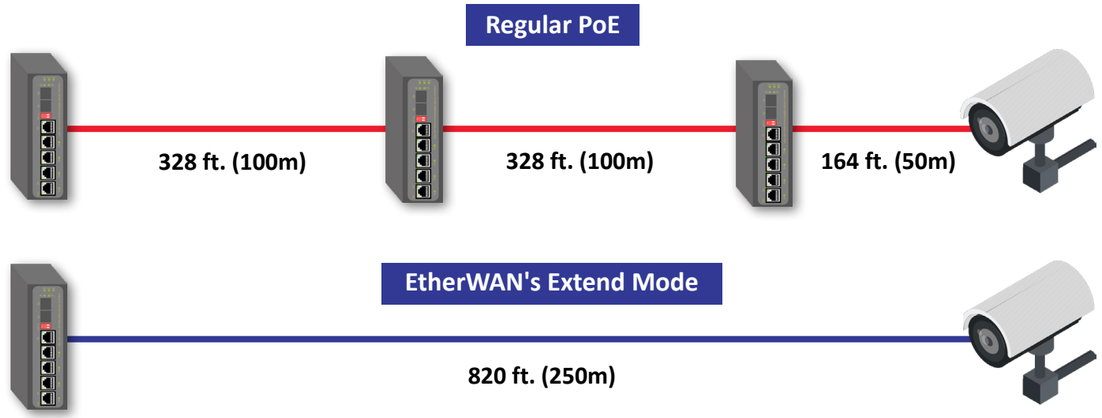
Normally network connected devices need one wire dedicated to data and one wire dedicated to power to operate. With PoE, both of these components can be merged into a single wire, eliminating the need for more wires and additional power supplies, and reducing time, energy and cost.



EtherWAN's PoE is Better!

Extend Mode: Long Distance PoE

Achieve distances over the standard 328 feet (100M) PoE power distance! With extend mode enabled, a single PoE port can deliver power and data to distances of up to 820 feet (250M). That's 2.5 times farther than the conventional distance. Extend mode eliminates the redundant need for each network device to have its own power supply within close proximity.

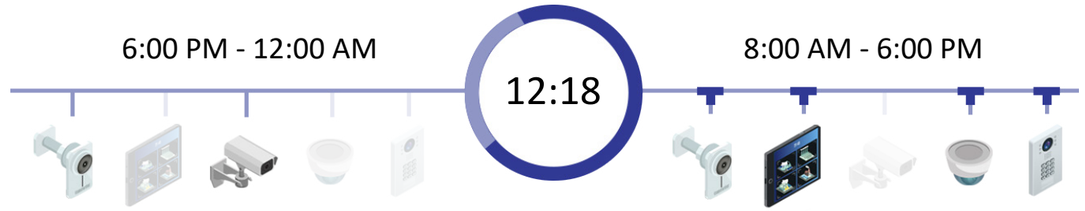


Intelligent Power Handling

Prevent failures by blocking new PoE devices from exceeding the available power. For example, even though a switch may be capable of sending out 90W of power, it will only provide whatever is needed by the device connected to the port. Therefore if the device needs only 10W of power, the switch is intelligent enough to provide only 10W. This is important because if a device receives more power than it requires, the circuitry will be damaged.

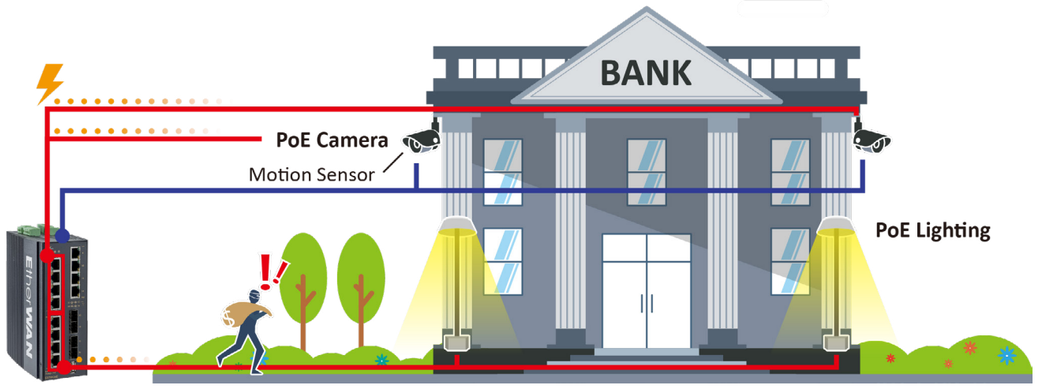
PoE Scheduling: More Efficient and Secure Networks

Choose when devices need power with PoE scheduling. Supplying power to network devices can take up a lot of energy and bandwidth. However, when these devices are on 24/7 and left on after business hours, they risk being compromised by attackers.

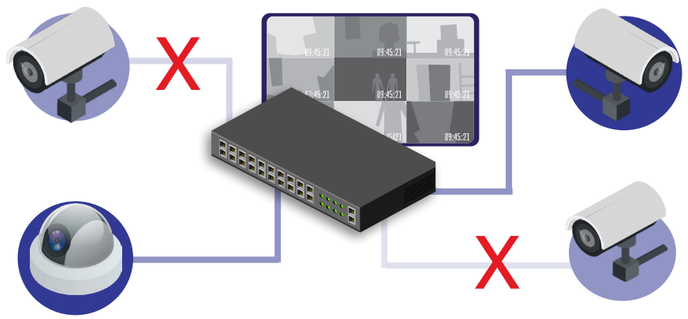


PoE Lighting

EtherWAN is writing a new page in the world of PoE with a solution tailor made specifically for security using PoE lighting. When alarm signals such as motion detection are sent from peripheral devices, PoE lights can be automatically turned on when received through the integrated digital input. Alarm-triggered lighting saves energy, allows for brighter surveillance footage, and even encourages potential intruders to abandon their targets. With configurable lighting duration and repeat time features, the PoE port can control the light to turn on and off at specified time intervals. This creates a flashing light sequence that deters intruders.



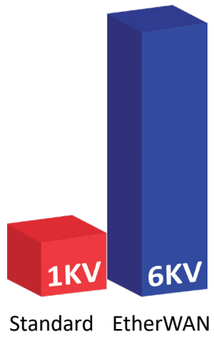
PoE Watchdog: Remotely Monitor and Reboot Unresponsive Devices



When devices fail or are unresponsive on the network, PoE Watchdog automatically reboots them. These devices are not always within proximity and reduce the need to manually monitor the device status and/or send personnel to go onsite to perform a manual reboot on the unresponsive device(s). This saves you valuable time and money.

PoE Surge Protection: Electrical Overload Protection for Devices

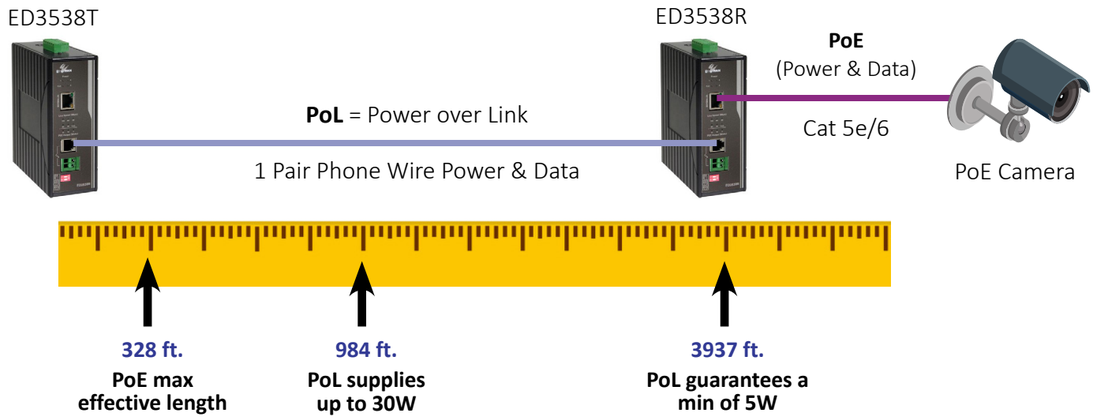
With PoE surge protection, devices are protected from overload, under-powering, and/or incorrect installation by electricians, ensuring reliable data transmission. EtherWAN uses 6KV surge protection which is 6 times above the commercial standard.



EtherWAN's Power over Link (PoL) Technology

Need to Go Further Than PoE?

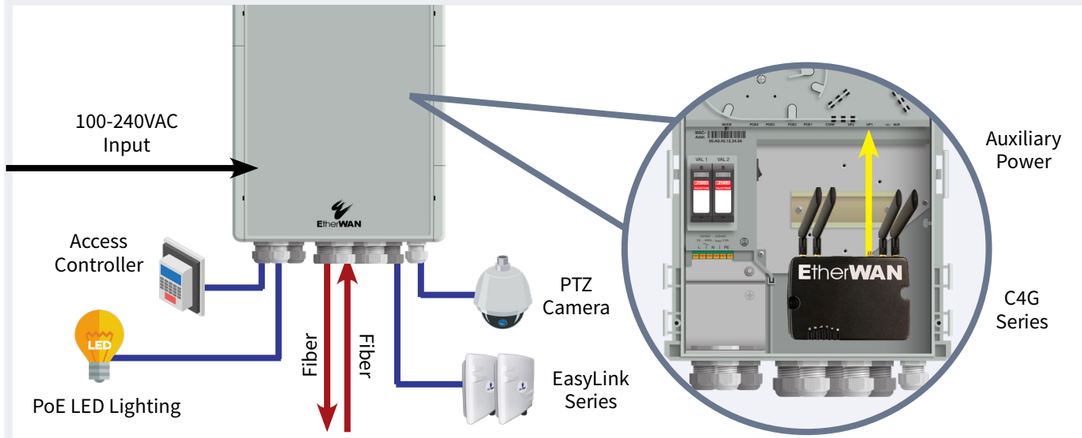
Distance is one of the major drawbacks of PoE as it only has a maximum effective length of 328 feet (100M). With EtherWAN's patented Power over Link (PoL) technology, power and data can be sent over a single pair of wires, such as traditional phone lines or coaxial cable, up to 12 times further than PoE. PoL can deliver the power needed (up to 30W) to end devices such as IP cameras, controllers and access points, up to a 1.2 kilometers (0.75 miles), effectively addressing the issue of local power supplies or outlets.



EasyPoE Box

NEMA 4/4X Cabinet Series with Integrated PoE Switch

EtherWAN's EasyPoE Box Series is an integrated solution that combines a managed PoE switch, splice tray, power supply, and a DIN-rail for accessories, all in a single, secure, NEMA-rated cabinet enclosure. This one-stop solution provides the power, time-saving design, and convenience to support a wide variety of applications including surveillance, LED lighting and other networking applications. (Full product specs on page 20).



PoE Products
Hardened Managed PoE Switches



Model Name	EX75900 Series	EX78900E Series	EX78900 Series
Interface			
Max. Total Ports	**28**	**16**	**16**
Max.10/100/1000BASE-T	24	12	12
Max. 1000BASE-X	-	-	4
Max. 1000BASE-SX/LX/BX	-	-	4
Max. 1000BASE-SFP	4	-	4
Max. 100/1000BASE-SFP	-	4	-
Max. 1G/10G SFP+ or 1G SFP	4	-	-
Max. PoE Ports	24	12	8
Max. PoE Port Power	60W	60W	60W
PoE Power Budget	720W	240W	240W
IEEE 802.3af	√	√	√
IEEE 802.3at	√	√	√
IEEE 802.3bt	√	√	-
Console Port	RJ45	RJ45	DB9 RS-232
Digital Input	2	2	-
Alarm Contact	√	√	√
Performance			
MAC Address Table Size	16K	16K	16K
Packet Buffer Memory (bits)	12M	12M	12M
Jumbo Frame (bytes)	9K	9K	9K
Physical			
Casing	Metal	Aluminum	Aluminum
Installation*	R	D	D, P
Dimensions (in) (W x D x H)	17.4 x 10.6 x 1.74	2.8 x 5.5 x 6.7	2.7 x 5.5 x 6.7
Power Input			
No. of Power Inputs	2	2	2
Terminal Block	52 - 57 VDC	52 - 57 VDC	52 - 57 VDC
Environmental			
Operating Temperature	-40 to 75°C (-40 to 167°F)	-40 to 75°C (-40 to 167°F)	-40 to 75°C (-40 to 167°F)
Relative Humidity	5% to 95%	5% to 95%	5% to 95%
Network Redundancy			
Alpha-Ring / Alpha-Chain	√	√	√
STP / RSTP / MSTP	√	√	√
Network Management & Control			
Management Features	Layer 2: CLI, Telnet, Web, SNMP, Security, QoS, VLAN, Config Backup, FW Upgrade		
Layer 3 Features	Static routing, RIP v1/v2, OSPF v2, VRRP	Static routing, RIP v1/v2, OSPF v2, VRRP	Static routing, RIP v1/v2, OSPF v2, VRRP
Regulatory Approvals			
EMI	FCC Part 15B Class A EN 61000-6-4	FCC Part 15B Class A,EN 61000-3-2, EN 61000-3-3, EN 61000-6-4	FCC Part 15B Class A, EN 61000-3-2 EN 61000-3-3, EN 61000-6-4
EMS	EN 61000-4-2,3,4,5,6,8	EN 61000-4-2,3,4,5,6,8	EN 61000-6-2, EN 61000-4-2,3,4,5,6,8
Safety	UL 62368-1	UL 61010-1	UL 61010-1
Environmental	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)
Warranty			
Limited Lifetime	√	√	√

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

Hardened Managed PoE Switches



Model Name	EX78000 Series	EX46100 Series	EX48000 Series
Interface			
Max. Total Ports	**12**	**8**	**5**
Max. 10/100BASE-TX	8	8	5
Max.10/100/1000BASE-T	2	-	-
Max. 1000BASE-X	2	-	-
Max. 100BASE-FX	2	2	1
Max. 100BASE-SFP	2	-	-
Max. 1000BASE-SX/LX/BX	2	-	-
Max. 100/1000BASE-SFP	2	-	-
Max. PoE Ports	8	4	4
Max. PoE Port Power	60W	30W	30W
PoE Power Budget	240W	120W	120W
IEEE 802.3af	√	√	√
IEEE 802.3at	√	-	-
Console Port	DB9 RS-232	-	-
Alarm Contact	√	√	√
Performance			
MAC Address Table Size	16K	1K	1K
Packet Buffer Memory (bits)	12M	1M	512K
Physical			
Casing	Aluminum	Aluminum	Aluminum
Installation*	D, P	D, P, R	Desktop, W, D
Dimensions (in) (W x D x H)	2.8 x 5.5 x 6.8	2.7 x 4.3 x 5.3	7.8 x 5.3 x 1.4
Power Input			
No. of Power Inputs	2	3	3
Terminal Block	52 - 57VDC	47 - 57VDC	47 - 57VDC
DC Jack	-	47 - 57VDC	47 - 57VDC
Environmental			
Operating Temperature	-40 to 75°C (-40 to 167°F)	-40 to 75°C (-40 to 167°F)	-40 to 75°C (-40 to 167°F)
Relative Humidity	5% to 95%	5% to 95%	5% to 95%
Network Redundancy			
Alpha-Ring / Alpha-Chain	√	-	-
STP / RSTP / MSTP	√	-	-
Network Management & Control			
Layer 2 Features	Layer 2: CLI, Telnet, Web, SNMP Security, QoS, VLAN, Config Backup, FW Upgrade	IP Configuration, VLAN, QoS, Web Interface, FW Upgrade	
Regulatory Approvals			
EMI	FCC Part 15B Class A, EN 61000-6-4	FCC Part 15B Class A, EN 61000-6-4, EN 55022 Class A	FCC Part 15B Class A, EN 55022 EN 61000-3-2, EN 61000-3-3 EN 61000-6-4
EMS	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8
Safety	UL 61010-1	-	-
Environmental	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)
Warranty			
Limited Lifetime	√	√	√

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

Hardened Unmanaged PoE Switches


Model Name	EX46900A Series	EX42395BT
Interface		
Max. Total Ports	**10**	**6**
Max. 10/100BASE-T(X)	-	-
Max.10/100/1000BASE-T(X)	8	5
Max. 1000BASE-X	2	-
Max. 100BASE-FX	-	-
Max. 1000BASE-SX/LX/BX	2	-
Max. 1000BASE-SFP	2	-
Max. 100/1000BASE-SFP	-	2
Max. PoE Ports	8	4
Max. PoE Port Power	30W	90W
PoE Power Budget	120W	240W
IEEE 802.3af	√	√
IEEE 802.3at	√	√
IEEE 802.3bt	-	√
Alarm Contact	√	√
Performance		
MAC Address Table Size	8K	1K
Packet Buffer Memory (bits)	4M	1M
Jumbo Frame (bytes)	9.6K	9K
Physical		
Casing	Aluminum	Aluminum
Installation*	D	D,W
Dimensions (in) (W x D x H)	2.6 x 4.9 x 5.7	1.69 x 4.13 x 5.59
Power Input		
No. of Power Inputs	2	2
Terminal Block	18 - 57VDC	48 - 56VDC
DC Jack	-	-
Environmental		
Operating Temperature	-40 to 75°C (-40 to 167°F)	-40 to 75°C (-40 to 167°F)
Relative Humidity	5% to 95%	5% to 95%
Regulatory Approvals		
EMI	FCC Part 15B Class A, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3	FCC Part 15B Class A, EN 55032 EN 55024
EMS	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8	EN 61000-4-2,4,5
Safety	UL 61010-1	UL 60950-1
Environmental	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)	EN 60068-2-6 (Vibration) EN 60068-2-27 (Shock) EN 60068-2-32
Warranty		
Limited Lifetime	√	√

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

Hardened Unmanaged PoE Switches



Model Name	EX45900 Series	EX42300 Series	EX41922-T
Interface			
Max. Total Ports	**6**	**6**	**4**
Max. 10/100BASE-T(X)	-	4	-
Max.10/100/1000BASE-T(X)	5	1	2
Max. 1000BASE-X	1	1	2
Max. 100BASE-FX	-	-	-
Max. 1000BASE-SX/LX/BX	1	-	-
Max. 1000BASE-SFP	1	1	-
Max. 100/1000BASE-SFP	-	-	2
Max. PoE Ports	4	4	2
Max. PoE Port Power	30W	30W	30W
PoE Power Budget	120W	120W	60W
IEEE 802.3af	√	√	√
IEEE 802.3at	√	√	√
Alarm Contact	√	√	√
Performance			
MAC Address Table Size	8K	8K	8K
Packet Buffer Memory (bits)	1M	1M	1M
Jumbo Frame (bytes)	10K	10K	10K
Physical			
Casing	Metal	Metal	Metal
Installation*	D	D	D
Dimensions (in) (W x D x H)	1.4 x 3.5 x 3.9	1.18 x 4 x 5.96	1.4 x 3.5 x 3.9
Power Input			
No. of Power Inputs	2	2	2
Terminal Block	18 - 57VDC	18 - 57VDC	52 - 57VDC
DC Jack	-	-	-
Environmental			
Operating Temperature	-40 to 75°C (-40 to 167°F)	-40 to 75°C (-40 to 167°F)	-40 to 75°C (-40 to 167°F)
Relative Humidity	5% to 95%	5% to 95%	5% to 95%
Regulatory Approvals			
EMI	FCC Part 15B Class A EN 61000-6-4, EN 61000-3-2, EN 61000-3-3, EN 55022 Class A	FCC Part 15B Class A, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3, EN 55022 Class A	FCC Part 15B Class A EN 61000-6-4
EMS	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8
Safety	UL 60950-1	UL 60950-1	UL 61010-1
Environmental	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)
Warranty			
Limited Lifetime	√	√	√

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

Industrial PoE Switches

Model Name	EX38000 Series
	Managed
Interface	
Max. Total Ports	**5**
Max. 10/100BASE-TX	5
Max. 100BASE-FX	1
Max PoE Ports	4
Max PoE Port Power	30W
PoE Power Budget	120W
IEEE 802.3af	√
Alarm Contact	√
Performance	
MAC Address Table Size	1K
Packet Buffer Memory (bits)	512K
Physical	
Casing	Metal
Installation*	Desktop, W, D
Dimensions (in) (W x D x H)	7.8 x 5.3 x 1.4
Power Input	
No. of Power Inputs	3
Terminal Block	47 - 57VDC
DC Jack	47 - 57VDC
Environmental	
Operating Temperature	-10 to 60°C (14 to 140°F)
Relative Humidity	5% to 95%
Network Management & Control	
Management Features	IP Configuration, VLAN, QoS, Web Interface, FW Upgrade
Regulatory Approvals	
EMI	FCC Part 15B Class A, EN 61000-6-4 EN 61000-3-2, EN 61000-3-3 EN 55022 Class A
EMS	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8
Environmental	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)
Warranty	
Limited Lifetime	√

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

Commercial Managed PoE Switches




Model Name	EX26484	EX26262F	EX17242	EX17162
Interface				
Max. Total Ports	**52**	**26**	**26**	**18**
Max. 10/100BASE-TX	-	-	24	16
Max.10/100/1000BASE-T	48	24	2	2
Max. 1000BASE-SFP	-	-	2	2
Max. 100/1000BASE-SFP	-	2	-	-
Max. 1/10 Gigabit SFP+	4	-	-	-
Max. PoE Ports	48	24	24	16
Max. PoE port power	30W	30W	30W	30W
PoE Power Budget	740W	370W	369.6W	240W
IEEE 802.3af	√	√	√	√
IEEE 802.3at	√	√	√	√
Console Port	RJ45	RJ45	-	-
Performance				
MAC Address Table Size	32K	8K	4K	4K
Packet Buffer Memory (bits)	4M	512K	2.75M	2.75M
Jumbo Frame (bytes)	10K	9K	-	-
Physical				
Casing	Metal	Metal	Metal	Metal
Installation*	R	R	R	R
Dimensions (in) (W x D x H)	17.4 x 14.7 x 1.7	17.4 x 8.3 x 1.7	17.3 x 13.2 x 1.7	17.3 x 13 x 1.7
Power Input				
No. of Power Inputs	1	1	1	1
100 - 240VAC	√	√	√	√
Environmental				
Operating Temperature	0 to 45°C (32 to 113°F)	-10 to 60°C (14 to 140°F)	0 to 45°C (32 to 113°F)	0 to 45°C (32 to 113°F)
Relative Humidity	10% to 90%	10% to 90%	10% to 95%	10% to 95%
Network Redundancy				
STP / RSTP / MSTP	√	√	-	-
Network Management & Control				
Management Features	Layer 2: CLI, Telnet, Web, SNMP, Security, QoS, VLAN, Config Backup, FW Upgrade		IP Configuration, VLAN, QoS, Web Interface, FW Upgrade	
Regulatory Approvals				
EMI	FCC Part 15 Class A CE Mark Class A	FCC Part 15 Class A CE Mark Class A	FCC Part 15 Class A CE Mark Class A	FCC Part 15 Class A CE Mark Class A
Safety	UL 60950-1	UL 60950-1	UL 60950-1	UL 60950-1
Warranty				
Length	3 yrs	3 yrs	3 yrs	3 yrs

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

Commercial Managed PoE Switches



Model Name	EX19082	EX19164	EX19244
Interface			
Max. Total Ports	**10**	**26**	**26**
Max. 10/100BASE-TX	-	-	24
Max.10/100/1000BASE-T	48	24	2
Max. 1000BASE-SFP	-	-	2
Max. 100/1000BASE-SFP	-	2	-
Max. 1/10 Gigabit SFP+	4	-	-
Max. PoE Ports	48	24	24
Max. PoE port power	30W	30W	30W
PoE Power Budget	740W	370W	369.6W
IEEE 802.3af	√	√	√
IEEE 802.3at	√	√	√
Console Port	RJ45	RJ45	-
Performance			
MAC Address Table Size	32K	8K	4K
Packet Buffer Memory (bits)	4M	512K	2.75M
Jumbo Frame (bytes)	10K	9K	-
Physical			
Casing	Metal	Metal	Metal
Installation*	R	R	R
Dimensions (in) (W x D x H)	17.4 x 14.7 x 1.7	17.4 x 8.3 x 1.7	17.3 x 13.2 x 1.7
Power Input			
No. of Power Inputs	1	1	1
100 - 240VAC	√	√	√
Environmental			
Operating Temperature	0 to 45°C (32 to 113°F)	-10 to 60°C (14 to 140°F)	0 to 45°C (32 to 113°F)
Relative Humidity	10% to 90%	10% to 90%	10% to 95%
Network Redundancy			
STP / RSTP / MSTP	√	√	-
Network Management & Control			
Management Features	Layer 2: CLI, Telnet, Web, SNMP, Security, QoS, VLAN, Config Backup, FW Upgrade		IP Configuration, VLAN, QoS, Web Interface, FW Upgrade
Regulatory Approvals			
EMI	FCC Part 15 Class A CE Mark Class A	FCC Part 15 Class A CE Mark Class A	FCC Part 15 Class A CE Mark Class A
Safety	UL 60950-1	UL 60950-1	UL 60950-1
Warranty			
Length	3 yrs	3 yrs	3 yrs

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

Commercial Managed PoE Switches


Model Name	EX17082	EX17908
Interface		
Max. Total Ports	**10**	**8**
Max. 10/100BASE-TX	8	-
Max.10/100/1000BASE-T	2	8
Max. 1000BASE-SFP	2	-
Max. PoE Ports	8	8
Max. PoE Port Power	30W	30W
PoE Power Budget	240W	240W
IEEE 802.3af	√	√
IEEE 802.3at	√	√
Performance		
MAC Address Table Size	4K	8K
Packet Buffer Memory (bits)	2.75M	2M
Jumbo Frame (bytes)	-	9.6K
Physical		
Casing	Metal	Metal
Installation*	R	R
Dimensions (in) (W x D x H)	17.3 x 8.7 x 1.7	10.5 x 6.3 x 1.7
Power Input		
No. of Power Inputs	1	1
100 - 240VAC	√	√
Environmental		
Operating Temperature	0 to 45°C (32 to 113°F)	0 to 40°C (32 to 104°F)
Relative Humidity	10% to 95%	10% to 95%
Network Management & Control		
Management Features	IP Configuration, VLAN, QoS, Web Interface, FW Upgrade	
Regulatory Approvals		
EMI	FCC Part 15 Class A CE Mark Class A	FCC Part 15 Class A CE Mark Class A
Safety	UL 60950-1	-
Warranty		
Length	3 yrs	3 yrs

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Commercial Unmanaged PoE Switches

Model Name	EX17162A
Interface	
Max. Total Ports	**18**
Max. 10/100BASE-TX	16
Max.10/100/1000BASE-T	2
Max. 1000BASE-SFP	2
Max. PoE Ports	16
Max. PoE Port Power	30W
PoE Power Budget	240W
IEEE 802.3af	√
IEEE 802.3at	√
Performance	
MAC Address Table Size	4K
Packet Buffer Memory (bits)	2.75M
Physical	
Casing	Metal
Installation*	R
Dimensions (in) (W x D x H)	17.3 x 13.2 x 1.7
Power Input	
No. of Power Inputs	1
100 - 240VAC	√
Environmental	
Operating Temperature	0 to 45°C (32 to 113°F)
Relative Humidity	10% to 95%
Regulatory Approvals	
EMI	FCC Part 15 Class A CE Mark Class A
Safety	UL 60950-1
Warranty	
Length	3 yrs

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PoE Media Converters

Model Name	EL2242	EL1032T Series
Interface		
Max. 10/100BASE-TX	-	1
Max.10/100/1000BASE-T	1	-
Max. 100BASE-FX	-	1
Max. 100/1000BASE-SFP	1	-
Max. PoE Output	30W	30W
IEEE 802.3af	√	√
IEEE 802.3at	√	√
IEEE 802.3bt	-	-
Mode of Operations		
Auto-negotiation, Auto-MDI/MDI-X	√	√
Flow Control	√	√
Store & Forward	√	√
Link Fault Pass Through	√	√
Physical		
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	INPUT 48 - 57VDC	INPUT 48 - 57VDC
Environmental		
Operating Temperature	–40 to 75°C (-40 to 167°F)	–10 to 60°C (14 to 140°F)
Relative Humidity	5% to 95%	5% to 95%
Regulatory Approvals		
EMI	FCC Part 15B Class A, EN 61000-3-2 EN 61000-3-3, EN 61000-6-4	FCC Part 15B Class A, EN 61000-6-4, EN 55022
EMS	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8
Safety	UL 60950-1, IEC 60950-1 EN 60950-1	-
Environmental	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free Fall)
Warranty		
Limited Lifetime	√	√

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PoE Injector & Splitter


Model Name	INJ90BT-24	SPL90BT
Interface		
Max.10/100/1000BASE-T	2 (1 connection to network + 1 PoE connection to device)	2 (1 data out +1 PoE in)
Max. PoE Output	(90W OUTPUT@56VDC Input) (60W OUTPUT@24VDC Input)	-
IEEE 802.3af	√	√
IEEE 802.3at	√	√
IEEE 802.3bt	√	√
Physical		
Casing	Aluminum	Aluminum
Installation*	D, W	D, W
Dimensions (in) (W x D x H)	1.26 x 3.21 x 4.07	1.26 x 3.21 x 4.07
Power Input		
No. of Power Inputs	1	1*
Terminal Block	INPUT 48 - 57VDC	*OUTPUT: 48VDC@1.5A, 24VDC@1.5A 16VDC@1.5A, 12VDC@1.5A
PoE Inputs	-	1
Environmental		
Operating Temperature	–40 to 75°C (-40 to 167°F)	–40 to 75°C (-40 to 167°F)
Relative Humidity	5% to 95%	5% to 95%
Regulatory Approvals		
EMI	FCC Part 15B Class A EN 55032, EN 55024	FCC Part 15B Class A EN 55032, EN 55024
EMS	EN 61000-4-2,4,5	EN 61000-4-2,4,5
Safety	UL 60950-1	UL 60950-1
Environmental	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) EN 60068-2-32 (Free Fall)	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) EN 600068-2-32 (Free Fall)
Warranty		
Limited Lifetime	√	√

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PoE & PoL Ethernet Extenders



Model Name	ED3638	ED3238	ED3538
Interface			
Ethernet Port			
Max. 10/100 BASE-TX	1	1	1
Max. PoE/PSE port	1	1	1
IEEE 802.3af	√	√	√
IEEE 802.3at	√	-	√
Speed (Mbps)	10/100	10/100	10/100
Distance (meters)	100	100	100
Cable: 100BASE-TX	UTP CAT.5 (4 pair wire)	UTP CAT.5 (4 pair wire)	UTP CAT.5 (4 pair wire)
Ethernet Extender Port			
Port	One 75Ω BNC Port (with F-type connector)	One 75Ω BNC Port (with F-type Connector)	RJ11 port / Terminal Block
Cable	Coaxial Cable (5C2V/RG6)	Coaxial Cable (5C2V/RG6/U)	Twisted Pair Copper (12-30AWG)
Mode of Operation			
Auto-negotiation, Auto-MDI/MDI-X	√	√	√
Store & Forward	√	√	√
Physical			
Casing	Aluminum	Aluminum	Aluminum
Installation*	D, P, R	P, R	D, P, R
Dimensions (in) (WxDxH)	1.97 x 4.33 x 5.31	1.81 x 3.86 x 0.98	1.97 x 4.33 x 5.31
Power Input			
No. of Power Inputs	3	1	3
Terminal Block	46-57VDC	-	46-57VDC
DC Jack	48VDC	57VDC	48VDC
Max. PoE Power	30W with PoL	15.4W	30W with PoL
Environmental			
Operating Temperature	–40 to 75°C (-40 to 167°F)	–10 to 50°C (14 to 122°F)	–40 to 75°C (-40 to 167°F)
Relative Humidity	5% to 95%	5% to 95%	5% to 95%
Regulatory Approvals			
EMI	FCC Part 15B Class A EN 61000-3-2, EN 61000-3-3 EN 61000-6-4, EN 55022	CE, EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3, FCC Part 15B Class A	FCC Part 15B Class A, EN 61000-3-2 EN 61000-3-3, EN 61000-6-4 EN 55022
EMS	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8	EN 61000-6-2 EN 61000-4-2,3,4,5,6,8
Safety	UL 60950-1, IEC 60950-1	UL 60950-1, IEC 60950-1	UL 60950-1, IEC 60950-1
Environmental	IEC 60068-2-6 Fc (Vibration), IEC 60068-2-27 Ea (Shock) IEC 60068-2-32 Ed (Free Fall)	-	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) IEC 60068-2-32 Ed (Free Fall)
Warranty			
Length	Limited Lifetime	3 yrs.	Limited Lifetime

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PoE & PoL Ethernet Extenders

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When Connectivity is Crucial

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