

EX42900 Series

Hardened Unmanaged 5/8-port 10/100/1000BASE Gigabit Ethernet Switch



Overview

EtherWAN's EX42900 Series is a compact Hardened Unmanaged Gigabit switching platform, designed for easy deployment in harsh environments.

The EX42900 Series is equipped with five or eight Gigabit Ethernet ports, or a combination of Gigabit copper ports and one Gigabit fiber port for long distance connectivity. Although unmanaged, the EX42900 is feature-rich with Jumbo Frame support, full wire speed Gigabit throughput, QoS support and eco-friendly IEEE 802.3az EEE (Energy Efficient Ethernet) compliant, making the EX42900 Series a powerful yet energy efficient network switch.

EtherWAN – "When Connectivity is Crucial."

Spotlight

- **Hardened Grade**
 - Supports -40 to 75°C (-40 to 167°F) operating temperature
- **Jumbo Frame Support**
 - Up to 10K bytes (EX42905/EX42914 Series)
 - Up to 9720 bytes (EX42908/EX42917 Series)
- **Fiber Connectivity**
 - Up to one 1000BASE-SX ports with SC and ST options
- **High Reliability**
 - Fanless Design
 - No moving part

Hardware Specifications

Technology

Standards

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX/100BASE-FX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3z 1000BASE-SX/1000BASE-LX
- IEEE 802.3x, Full duplex flow control
- IEEE 802.3az Energy Efficient Ethernet
- IEEE 802.1p Quality of Service (QoS)

Forward and Filtering Rate

- 14,880pps for 10Mbps
- 148,810pps for 100Mbps
- 1,488,100pps for 1000Mbps

Packet Buffer Memory

- EX42905/EX42914: 1M bits
- EX42908/EX42917: 192KB

Processing Type

- Store-and-Forward
- Auto Negotiation
- Half-duplex back-pressure and IEEE 802.3x full-duplex flow control
- Auto MDI/MDIX

Jumbo Frame

- EX42905/EX42914: 10K bytes
- EX42908/EX42917: 9720 bytes

Address Table Size

- EX42905/EX42914: 8K MAC addresses
- EX42908/EX42917: 4K MAC addresses

Broadcast Storm Protection Threshold (EX42908/EX42917 only)

- Limit 15000 fps@64 frame size, 600 fps@1518 frame size.

Power

Input Voltage

- 12 to 48VDC

Power Consumption

- 6.5W Max. 0.25A@24VDC

Protection

- Reverse polarity protection

Mechanical

Casing

- Metal case
- IP30

Dimensions

- EX42905/EX42914:
30 x 76.3 x 110mm (W x D x H)
(1.18" x 3.05" x 4.4")
- EX42908/EX42917:
30 x 100 x 149mm (W x D x H)
(1.18" x 4" x 5.96")

Weight

- EX42905/EX42914: 0.34Kg (0.75lb.)
- EX42908/EX42817: 0.39Kg (0.841lb.)

Installation

- DIN-Rail (Top hat type 35mm)

Interface

Ethernet Ports

- EX42905/EX42914:
10/100/1000BASE-T: 5 or 4 ports
1000BASE-X: 0 or 1 ports
- EX42908/EX42917:
10/100/1000BASE-T: 8 or 7 ports
1000BASE-X: 0 or 1 ports

LED Indicators

- EX42905/EX42914:
Per Unit: Power (Green)
Per Port: 10/100M (Green), 1000M (Yellow)
- EX42908/EX42917:
Per Unit: Power 1 (Green), Power 2 (Green), Alarm (Red)
Per Port: 10/100M (Green), 1000M (Yellow)

Alarm Contact (EX42908/EX42917 only)

- One relay output with current 1A@250VAC
- Supports normal close and normal open

DIP Switches (EX42908/EX42917 only)

- Enable/Disable Port fault alarm

Environment

Operating Temperature

- -40 to 75°C (-40 to 167°F)
Tested @ -40 to 85°C (-40 to 185°F)

Storage Temperature

- -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity

- 5% to 95% (non-condensing)

Regulatory Approvals

ISO

- Manufactured in an ISO 9001 facility

Safety

UL 60950 (EX42905/EX42914 Series only)

UL 62368 (EX42908/EX42917 Series only)

ISA 12.12.01 Class I Div. 2/ATEX Zone 2
(EX42908/EX42917 Series only)

EMI

FCC Part 15B Class A

VCCI 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 (ESD Standards)
- EN 61000-4-3 (Radiated RFI Standards)
- EN 61000-4-4 (Burst Standards)
- EN 61000-4-5 (Surge Standards)
- EN 61000-4-6 (Induced RFI Standards)
- EN 61000-4-8 (Magnetic Field Standards)

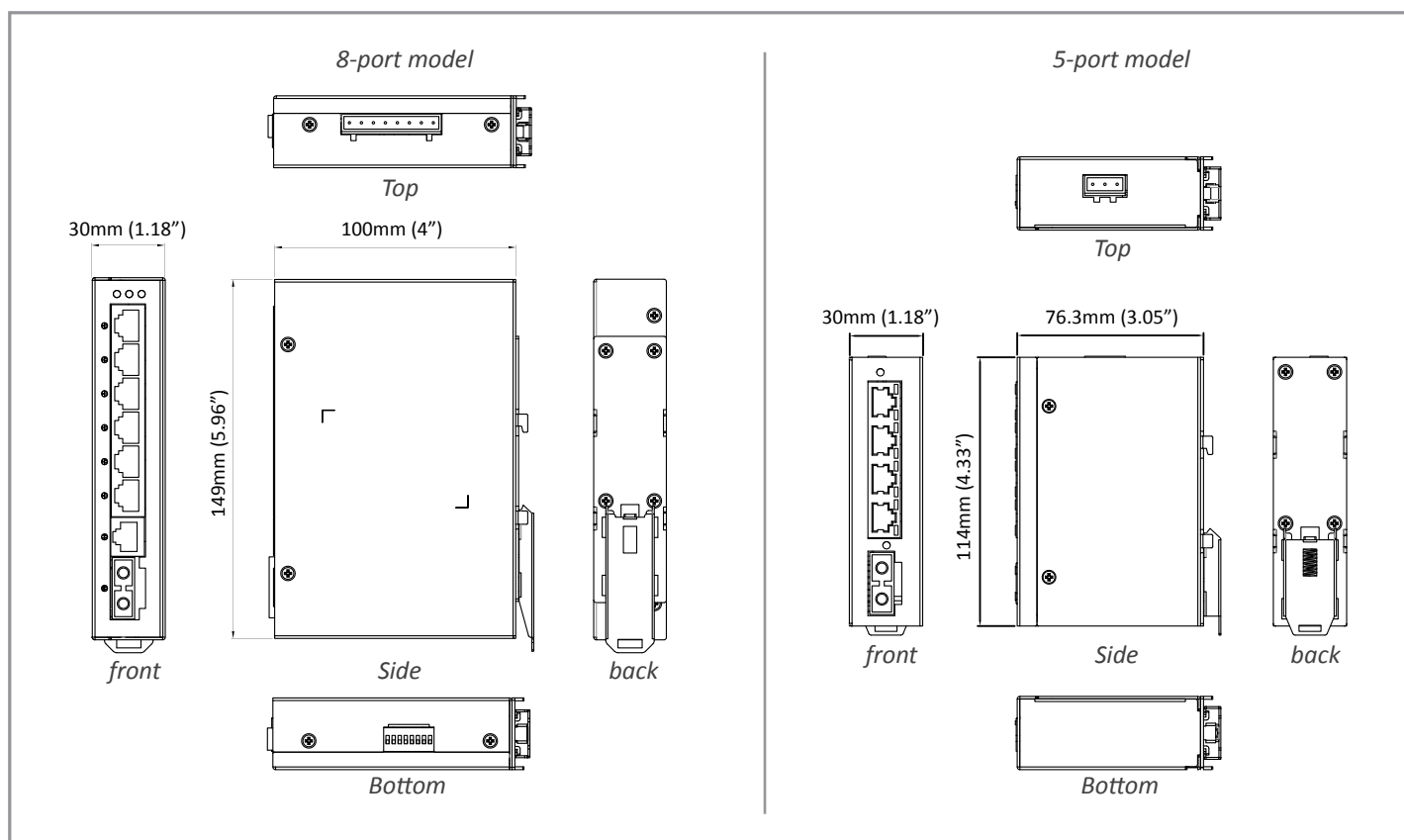
Environmental Test Compliances

IEC 60068-2-6 Fc (Vibration)

IEC 60068-2-27 Ea (Shock)

FED STD 101C Method 5007.1 (Free fall w/package)

Dimensions



Ordering Information

Model

EX42905	5-port 10/100/1000BASE-T Gigabit Hardened Unmanaged Ethernet Switch
EX42914-X	4-port 10/100/1000BASE-T +1-port 1000BASE-X Gigabit Hardened Unmanaged Ethernet Switch
EX42908	8-port 10/100/1000BASE-T Gigabit Hardened Unmanaged Ethernet Switch
EX42917-X	7-port 10/100/1000BASE-T +1-port 1000BASE-X Gigabit Hardened Unmanaged Ethernet Switch

* DIN-Rail mounting kit included.

Optical Port Options (X)

3	1000BASE-SX (SC) - 550m
5	1000BASE-SX (ST) - 550m
A	1000BASE-LX (SC) - 10km
R	1000BASE-BX (SC) WDM-TX: 1310nm/RX: 1550nm-20Km
S	1000BASE-BX (SC) WDM-TX: 1550nm/RX: 1310nm-20Km

Optional Accessories

HDR-30-24	30W/1.5A DIN-Rail 24VDC Industrial Power Supply
HDR-60-24	60W/2.5A DIN-Rail 24VDC Industrial Power Supply
EDR-75-24	75W/3.2A DIN-Rail 24VDC Industrial Power Supply
EX41-145046-X	Power Supply 45W 12VDC with Open Wire (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA