EX45900 Series

Hardened Unmanaged 5-port 10/100/1000BASE (4 x PoE) +1-port 1000BASE-X Gigabit Ethernet Switch

Overview

EtherWAN's EX45900 Series provides a hardened 5-port switching platform supporting IEEE 802.3at Power over Ethernet, high performance switching with robust features required for mission-critical and harsh environments where sustained connectivity is crucial.

The EX45900 Series is equipped with 4 10/100/1000BASE-TX PoE ports, in combination with one Gigabit Fiber option. The EX45900 is feature rich with 10K Jumbo Frame support, full wire speed Gigabit throughput, QoS support and eco-friendly IEEE 802.3az EEE (Energy Efficient Ethernet) compliant, making the EX45900 Series a powerful yet energy efficient network switch.

The IEEE 802.3at PoE ports provide up to 30W/port with a total power budget of 120W, making the switch truly versatile for connecting with PoE Powered Devices (PD) with different bandwidth and power consumption requirements such as; outdoor PTZ dome cameras, wireless access points, and way-side communication devices.

EtherWAN – "When Connectivity is Crucial."

Spotlight

- **Power over Ethernet**
  - Port 1-4 are PoE ports that provide power up to 30W

- **Energy Efficient Ethernet (EEE)**
  - Supports IEEE 802.3az standard

- **Fiber Connectivity**
  - Up to one 1000BASE-SX ports with SFP options

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)
- IEEE 802.3af/at Power over Ethernet (PoE)

Forward and Filtering Rate
- 14,880pps for 10Mbps
- 148,810pps for 100Mbps
- 1,488,100pps for 1000Mbps

Packet Buffer Memory
- 1M bits

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

Jumbo Frame
- 10K bytes

Address Table Size
- 8192 MAC Addresses

Power

Input
- 18-57VDC

Power Consumption
- Device: Max. 7W (without PoE)
- PoE Power Budget: 120W

PoE Technology
- Alternative A
  Pins 1/2(+), 3/6(-)

Protection
- Reverse Polarity Protection

Mechanical

Casing
- Metal Case
- IP30

Dimensions
- 30 x 100 x 149mm (W x D x H)
  (1.18" x 4" x 5.96")

Weight
- 0.34Kg (0.75lb.)

Installation
- DIN-Rail

Interface

Ethernet Ports
- 10/100/1000BASE-T: 5 ports
- 1000BASE-X: 0 or 1 ports

LED Indicators
- Per Unit: Power 1 (Green), Power 2 (Green), Alarm (Red)
- Per Port: 10/100M (Green), 1000M (Amber)
- Per PoE Port: PoE Status (Amber)

DIP Switches
- Enable/Disable Port fault alarm
- Enable/Disable Broadcast Storm Protection
- Enable/Disable Jumbo Frame

Alarm Contact
- One relay output with current 1A@250VAC
- Supports normal open

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

UL 61010 (EX45905/EX45915-V 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)
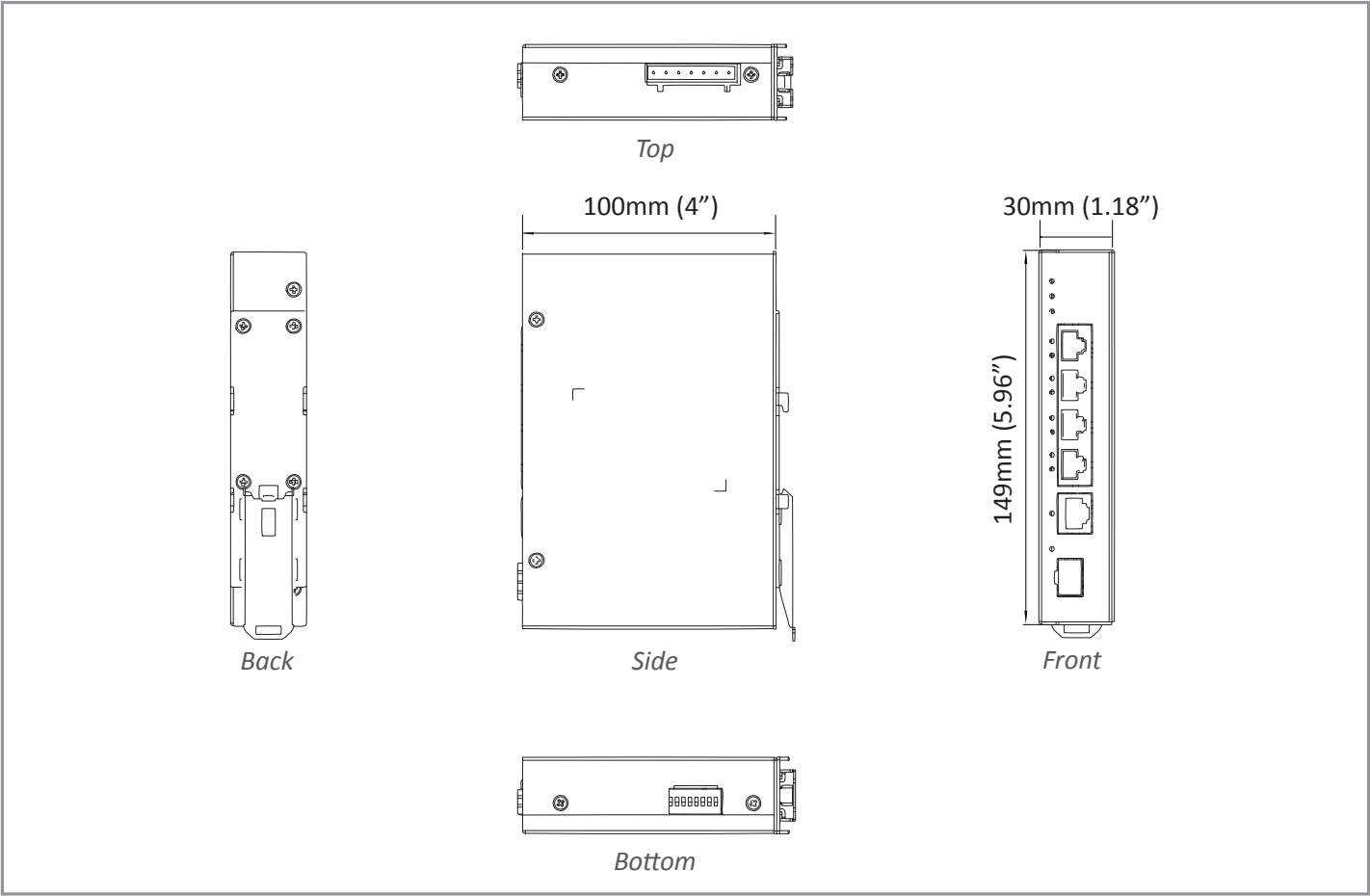- EN 61000-4-8 (Magnetic Field Standards)

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

Top

100mm (4")

30mm (1.18")

149mm (5.96")

Back

Side

Front

Bottom

Ordering Information

Model

EX45905	5-port 10/100/1000BASE-T (4 x PoE) Gigabit Hardened Unmanaged Ethernet Switch
EX45915-V	5-port 10/100/1000BASE-T (4 x PoE) +1-port 1000BASE-X Gigabit Hardened Unmanaged Ethernet Switch

* DIN-Rail mounting kit included.

Optional Accessories

NDR-240-48	240W/5A DIN-Rail 48VDC Industrial Power Supply