

EX24402

Managed 16-port 10/100BASE PoE with 2-port Gigabit SFP Combo Ethernet Switch



Overview

The EX24402 Managed 10/100BASE PoE Ethernet Switch is an ideal choice for your large, managed enterprise network. It packs 16 autosensing 10/100BASE Ethernet ports plus two SFP combo slots for Gigabit uplinks into a compact chassis that takes only 1U of rack space.

The switch acts as a PoE power source device, enabling you to supply power to PoE end devices such as wireless access points, IP cameras, VoIP phones, etc, on your 10/100BASE network. By using PoE, you free yourself from restrictions imposed by limited AC outlets and you can centralize your power distribution and backup power.

The 16 auto negotiating PoE ports provide up to 15.4 watts each for all ports, up to a total power budget of 195 watts. The EX24402 is equipped with EtherWAN's Alpha-Ring self-healing ring technology providing less than 15ms fault recovery time. Users are able to access management features such as port security, IGMP snooping, port-based VLAN, GARP protocols, link aggregation, via web browser, telnet, SSH, SNMP, RMON, TFTP, and RS-232 console interfaces.

EtherWAN — "When Connectivity is Crucial."

Spotlight

• PoE Connectivity

- Sixteen 10/100BASE IEEE802.3af Power over Ethernet ports
- Two Gigabit SFP combo ports

• Intelligent Management

- Optimize network performance with QoS, VLAN, and PoE scheduling, etc. Network redundancy is secured by EtherWAN's α -Ring, with fault recovery time < 15ms

• Remote Secure Access

- IEEE802.1x, and RADIUS support

Software Features

Management

- Interface
 - CLI, Telnet and Web Browser
 - SNMP v1/v2c/v3
- Firmware and configuration upgrade and backup via TFTP
- Supports DHCP Server/Client
- RMON (Remote monitoring): group 1, 2, 3, 9
- Port mirroring: TX/RX and both
- NTP (Network Time Protocol) time synchronization
- IEEE802.1ab LLDP (Link Layer Discovery Protocol)

Security

- MAC address filtering
- Enable/disable port
- Storm control (broadcast and multicast types)
- IEEE802.1x LAN access control
- Remote authentication through RADIUS
- SSH for CLI and Telnet security
- SSL for web security
- Multi-level user account/password against unauthorized configuration
- System log (remote/local)

Quality of Service (QoS)

- Priority Queues: 4 queues per port
- Traffic classification based on IEEE802.1p CoS, DSCP, WRR (Weighted round robin) and strict mode
- Rate Limiting (Ingress/Egress)

Layer 2 Features

- Auto-negotiation for port speed and duplex mode
- Flow Control
 - IEEE802.3x full duplex mode
 - Back-Pressure half duplex mode
- Redundant Protocol
 - IEEE802.1D Spanning Tree Protocol (STP)
 - IEEE802.1w Rapid Spanning Tree Protocol (RSTP)
 - IEEE802.1s Multiple Spanning Tree Protocol (MSTP)
 - Supports EtherWAN's Alpha-Ring topology for less than 15ms fault recovery time

Performance

- Switching Capability: 7.2Gbps
- Packet Buffer Size: 2M
- MAC Address Table: 8192

Hardware Specifications

Technology

Standards

- IEEE802.3 10BASE-T
- IEEE802.3u 100BASE-TX/100BASE-FX
- IEEE802.3ab 1000BASE-T
- IEEE802.3z 1000BASE-SX/1000BASE-LX
- IEEE802.3x Full duplex and flow control
- IEEE802.1p QoS
- IEEE802.1Q Tag VLANs
- IEEE802.1w RSTP
- IEEE802.1x Port-based Network Access Control
- IEEE802.3af Power over Ethernet (PoE)

Forward and Filtering Rate

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

Packet Buffer Memory

- 2M bits

Processing Type

- Store-and-Forward
- Auto Negotiation
- Half-duplex back-pressure and IEEE802.3x full-duplex flow control
- Auto MDI/MDIX

Address Table Size

- 8192 MAC addresses

Power

Input

- 100 to 240VAC, 50/60Hz

Power Consumption

- Max. 12W (without PoE)
- PoE power budget (depends on power input): 195W

PoE Technology

- Alternative B
Pins 7/8(+), 4/5(-)

PoE Power Output

- IEEE802.3af: up to 15.4W/port

Protection

- Overload current protection
- Reverse polarity protection

Mechanical

Casing

- Metal Case
- IP30

Dimensions

- 443.6mm (W) x 285mm (D) x 44mm (H)
(17.5" (W) x 11.2" (D) x 1.73" (H))

Weight

- 3.8Kg (8.38lbs.)

Installation

- Rack mounting

Interface

Ethernet Port

- 10/100BASE-TX: 16 ports
- 100BASE-FX: N/A
- Gigabit: 2 ports

Console Port

- Port: One DB9 RS-232 port

LED Indicators

- Per Unit: Power 1
- Per PoE Port: PoE (Amber)
- Per Port: Link/Act (Green), Speed (Green)

Environment

Operating Temperature

- 0°C to 45°C (32°F to 113°F)

Storage Temperature

- -10°C to 70°C (14°F to 158°F)

Ambient Relative Humidity

- 5% to 95% (non-condensing)

Regulatory Approvals

ISO

- Manufactured in an ISO 9001 facility

EMI

FCC Part 15B Class A

EN61000-6-4

EN55022

EN61000-3-2

EN61000-3-3

EMS

EN61000-6-2

- EN61000-4-2 (ESD Standards)
- EN61000-4-3 (Radiated RFI Standards)
- EN61000-4-4 (Burst Standards)
- EN61000-4-5 (Surge Standards)
- EN61000-4-6 (Induced RFI Standards)
- EN61000-4-8 (Magnetic Field Standards)

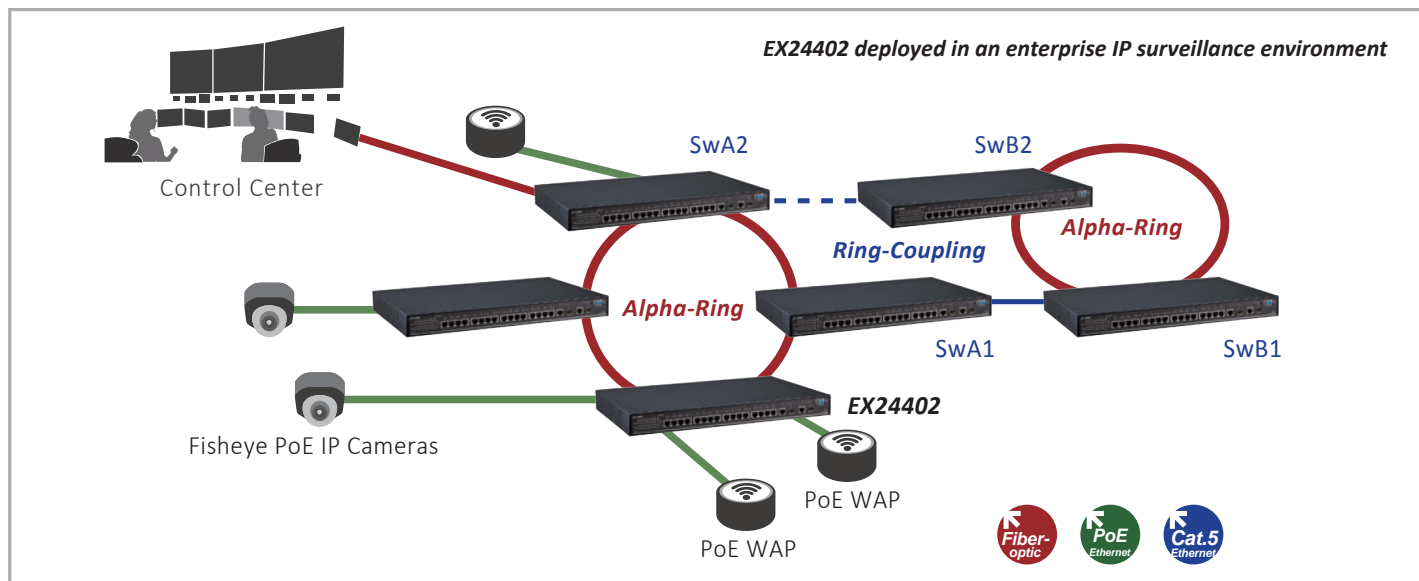
Environmental Test Compliance

IEC60068-2-6 Fc (Vibration Resistance)

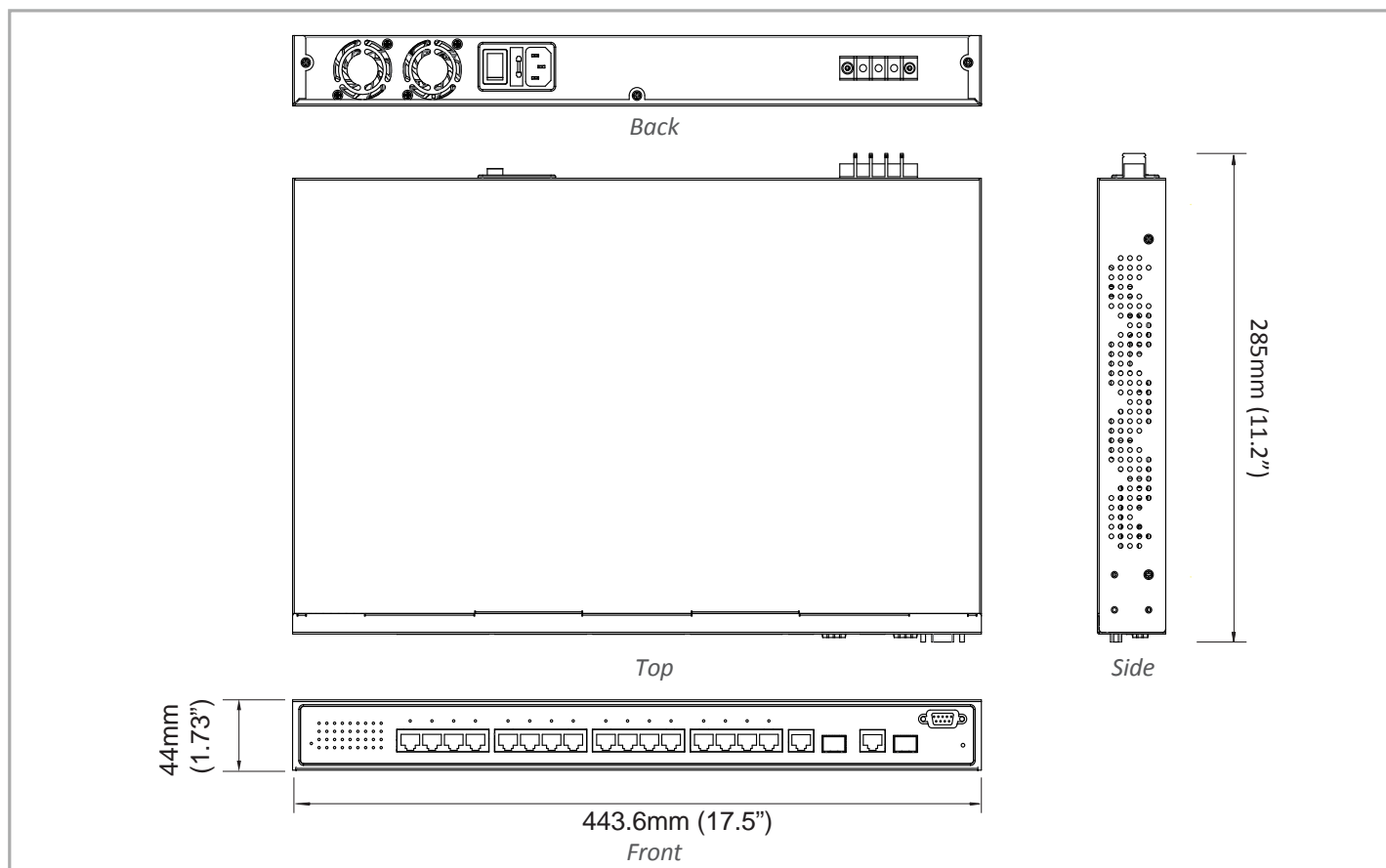
IEC60068-2-27 Ea (Shock)

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

Application Diagram



Dimensions



Ordering Information

Models

Models	Description
EX24402-0VCU	Managed 16-port 10/100BASE PoE with 2-port Gigabit SFP Combo Ethernet Switch