EX72000 Series

Hardened Managed 8 to 14 ports 10/100BASE and 2-port Gigabit Ethernet Switch with SFP options



Overview

This product is discontinued as of 13th Mar 2018.

EtherWAN's EX72000 Series provides a Hardened Fully Managed 14-port switching platform combining high performance switching backbone with robust and secure management features required for mission critical and harsh environments where sustained connectivity is crucial.

The EX72000 Series is equipped with eight to fourteen 10/100BASE Fast Ethernet ports, or in combination with up to Two Gigabit, Fixed Fiber, or SFP Combo port options. Panel mountable, the EX72000 Series is equipped with EtherWAN's Alpha-Ring self-healing technology, providing less than 15ms fault recovery time making it ideal for applications intolerant to interruption.

Users are able to access management features such as; port security, IGMP snooping, VLANs, GARP protocols, LACP, via web browser, Telnet, SNMP, RMON, TFTP, and RS-232 console interfaces.

EtherWAN — "When Connectivity is Crucial."

Spotlight

Versatile Connectivity

» Provides flexibility of 8-port to 14-port 10/100BASE-TX/FX/BX plus 2-port Gigabit-TX/SX/LX/BX/SFP combos

Intelligent Data Management

» Optimize network performance with QoS, VLAN etc.

Secure Remote Access

» IEEE802.1x and RADIUS support

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)
  • EtherWAN's Alpha-Ring network fault recovery (<15ms)
» VLANs
  • Port-based VLANs
  • IEEE802.1Q Tag VLANs (128 groups, 4096 VID)
  • GVRP (GARP VLAN Registration Protocol)
  • GMRP (GARP Multicast Registration Protocol)
» Link Aggregation
  • Static Trunk (2 groups, support MAC base)
  • IEEE802.3ad Link Aggregation Control Protocol
» IGMP Snooping
  • IGMP snooping v1/v2/v3

Performance

» Switching Capability: 6.4Gbps
» Packet Buffer Size: 2M bits
» MAC Address Table: 8192

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

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

- Redundant power inputs:
  12 - 48VDC (Terminal Block);
  12VDC (DC Jack)

Power Consumption

- 15W Max. 1.25A @ 12VDC, 0.625A @ 24VDC

Protection

• Reverse polarity protection

Mechanical

Casing

• Aluminum Case
• IP30

Dimensions

• 235mm (W) x 125mm (D) x 50mm (H)
(9.25" (W) x 4.92" (D) x 1.97" (H))

Weight

• 1.5Kg (3.3lbs.)

Installation

• DIN-Rail (Top hat type 35mm), Panel, or Rack mounting

Interface

Ethernet Port

• 10/100BASE-TX: 14, 13, 12 or 8 port
• 100BASE-FX: 0, 1 or 2 ports
• Gigabit: 0, 1 or 2 ports

Console Port

• Port: One DB9 RS-232 port

LED Indicators

• Per Unit:
Power 1 (Green)
Power 2 (Green)
Power 3 (Green)
• Per Port: Link/Activity (Green)
10/100M (Green)

Environment

Operating Temperature

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

Storage Temperature

• -40°C to 85°C (-40°F to 185°F)

Ambient Relative Humidity

• 5% to 95% (non-condensing)

Regulatory Approvals

ISO

• Manufactured in an ISO9001 facility

Safety

UL508

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)

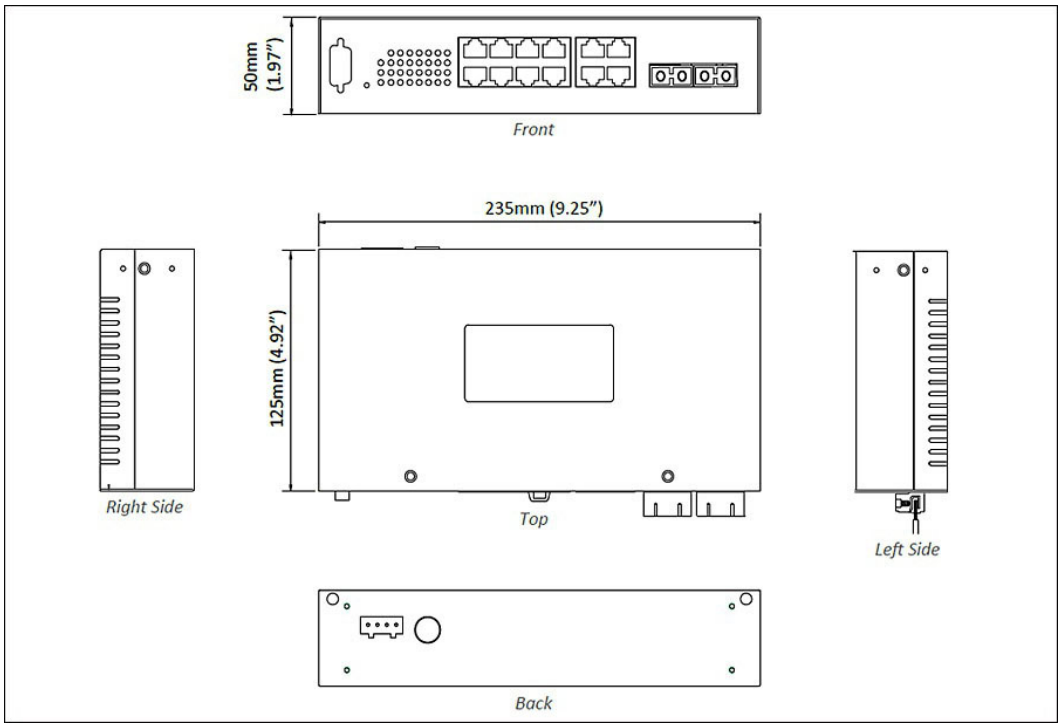
Environmental Test Compliance

IEC60068-2-6 Fc (Vibration Resistance)
FED STD 101C Method 5007.1 (Free fall w/ package)

Industrial Compliance

NEMA TS2

Dimensions


50mm
(1.97")
Front
235mm (9.25")
125mm (4.92")
Right Side
Top
Left Side
Back

Ordering Info

Model

EX72140-00B	14-port 10/100BASE-TX Hardened Managed Ethernet Switch
EX72141-X0B	13-port 10/100BASE-TX +1-port 100BASE-FX Hardened Managed Ethernet Switch
EX72142-X0B	12-port 10/100BASE-TX +2-port 100BASE-FX Hardened Managed Ethernet Switch
EX72102-X0B	8-port 10/100BASE-TX +2-port 100BASE-FX Hardened Managed Ethernet Switch
EX72128-0YB	12-port 10/100BASE-TX +1-port Gigabit Hardened Managed Ethernet Switch
EX72129-0YB	12-port 10/100BASE-TX +2-port Gigabit Hardened Managed Ethernet Switch
EX72088-0YB	8-port 10/100BASE-TX +1-port Gigabit Hardened Managed Ethernet Switch
EX72089-0YB	8-port 10/100BASE-TX +2-port Gigabit Hardened Managed Ethernet Switch

100FX Fiber Options (X)

1	Multi Mode (SC) - 2Km
2	Multi Mode (ST) - 2Km
6	Multi Mode (SC) WDM-TX: 1310nm/RX: 1550nm-2Km
7	Multi Mode (SC) WDM-TX: 1550nm/RX: 1310nm-2Km
8	Multi Mode (SC) WDM-TX: 1310nm/RX: 1550nm-5Km
9	Multi Mode (SC) WDM-TX: 1550nm/RX: 1310nm-5Km
A	Single Mode (SC) - 20Km
B	Single Mode (SC) - 40Km
H	Single Mode (ST) - 20Km
P	Single Mode (SC) WDM-TX: 1310nm/RX: 1550nm-20Km
Q	Single Mode (SC) WDM-TX: 1550nm/RX: 1310nm-20Km
R	Single Mode (SC) WDM-TX: 1310nm/RX: 1550nm-40Km
S	Single Mode (SC) WDM-TX: 1550nm/RX: 1310nm-40Km

Gigabit Port Options (Y)

1	10/100/1000BASE-TX
3	1000BASE-SX (SC) - 550m

4	1000BASE-SX (SC) - 2Km
5	1000BASE-SX (ST) - 550m
A	1000BASE-LX (SC) - 10Km
B	1000BASE-LX (SC) - 20Km
R	1000BASE-BX (SC) WDM-TX: 1310nm/RX: 1550nm-20Km
S	1000BASE-BX (SC) WDM-TX: 1550nm/RX: 1310nm-20Km
V	2-port 1000BASE SFP combo 10/100/1000BASE-TX

Optional Accessories

KD-AA96000	DIN-Rail mounting kit
KP-BK6212	Panel mounting kit
KR-BK72-400	Rack mounting kit
DR-30-24	30W/1.5A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)
DR-60-24	60W/2.5A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)
DR-75-24	75W/3.2A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)
EX41-136046-X	Power Supply 36W 12VDC with Open Wire (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA
EX41-136044-X	Power Supply 36W 12VDC with Latch (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA

© EtherWAN Systems, Inc. All rights reserved. 20260107
EtherWAN is constantly developing and improving products. Specifications are subject to change without notice and without incurring any obligation.