EX34000 Series

8-port 10/100Base Fast Ethernet Industrial Unmanaged PoE Ethernet Switches

Overview

The EX34000 Industrial Unmanaged PoE Ethernet Switch series is designed to operate in the harsh environments at the edge of the network. Whether on the factory floor or the street corner, the EX34000 will provide flawless communications when you need it most. The EX34000 is a Switch with the flexibility of eight Ethernet ports , 4 of which are PoE, that may be configured in various combinations of copper and fiber optic interfaces. Flexibility is the main feature of the EX34000, it may be DIN- Rail, Panel, or Rack mounted, and comes with Terminal Block and Power Jack power inputs to match the applications that require a tough, environmentally Hardened Ethernet Switch.

Port 1 ~ port 4 on EX34000 supports IEEE802.3af Power over Ethernet (PoE) Power Sourcing Equipment (PSE) and can detect an IEEE802.3af compliant Powered Device (PD). Using external 48VDC power inputs through Terminal Block or Power Jack, data and power can be transmitted to a Powered Device (PD) over the same twisted-pair Ethernet cable through port 1 ~ port 4 on EX34000.

Features

- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- Supports IEEE802.3af Power over Ethernet (PoE) Power Sourcing Equipment (PSE)
- 1024 MAC addresses
- 1M bits buffer memory
- 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- Alarms for power and port link failure by relay output
- Redundant power inputs with Terminal Block and DC Jack
- -10°C to 60°C (14°F to 140°F) operating temperature range
- Aluminum case
- Supports DIN-Rail, Panel, Rack Mounting installation

Ordering Information

EX34080-00Z	8-port 10/100Base-TX Industrial Unmanaged PoE Ethernet Switch
EX34071-X0Z	7-port 10/100Base-TX +1-port 100Base-FX Industrial Unmanaged PoE Ethernet Switch
EX34062-X0Z	6-port 10/100Base-TX +2-port 100Base-FX Industrial Unmanaged PoE Ethernet Switch

100FX Fiber Options:

(X) =1: Multi Mode (SC)
2: Multi Mode (ST)
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
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-2Km
9 : Multi Mode (SC) WDM-TX:1550nm/RX:1310nm-2Km

*More 100FX Fiber options also available upon request.

Power Input Interface:

(Z) =B : Terminal Block & DC Jack

Power Supply: (Optional)

*Option A - The Terminal Block type external power supply are not included. Please order the following part numbers, as required: DR-120-48

**Option B - The external power adapter and power cord are not included. Please order the following part numbers, recommend for indoor use, as required: AS-120P-48

*See page 5-7 to 5-13 for more detailed information about optional accessories (Din-Rail Power supply, Power adapter)

Installation Type: DIN Rail (mounting kit is included)

Optional Panel mount kit, ordered separately, part number: KP-AA96-480

Optional Rack mount kit, ordered separately, part number: KR-BK43-400

Specifications

Technology

Standards:
- IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/FX, IEEE802.3x, IEEE802.3af

Forward and Filtering Rate:
- 14,880pps for 10Mbps
- 148,810pps for 100Mbps

Packet Buffer Memory:
- 1M bits

Processing Type:
- Store-and-Forward
- Half-duplex back-pressure and IEEE802.3x full-duplex flow control

Address Table Size:
- 1024 MAC addresses

Power

Input:
- Input Voltage: 48VDC (Terminal Block; DC Jack)

Power Consumption:
- 72W Max. 1.5A@48VDC

Power Supply References:
- Terminal Block: 48VDC, 2.5A
- DC Jack: 48VDC, 2.5A

Overload Current Protection:
- Present

Reverse Polarity Protection:
- Present

Mechanical

Casing:
- Aluminum case
- IP30

Dimensions:
- 62mm (W) x 110mm (D) x 135mm (H)
  (2.44" (W) x 4.33" (D) x 5.31" (H))

Weight:
- 1Kg (2.2lbs.)

Installation:
- DIN-Rail(Top hat type 35mm), Panel, Rack Mounting

Interface

Ethernet Port:
- 10/100Base-TX: 8, 7 or 6 ports
- 100Base-FX: 0, 1 or 2 ports

LED Indicators:
- Per Unit: Power Status (Power 1, Power 2, Power 3)
- Per Port: 10/100TX, 100FX: Link/Activity

Alarm Contact:
- One relay output with current 0.1A @ 24VDC

Environment

Operating Temperature:
- -10°C to 60°C (14°F to 140°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, EN60950-1, IEC60950-1

EMI:
- FCC Part 15, Class A
- EN61000-6-3
  - EN55022
  - EN61000-3-2
  - EN61000-3-3

EMS:
- EN61000-6-2
  - EN61000-4-2 (ESD Standards)
    Contact: + / - 4KV; Criteria B
    Air: + / - 8KV; Criteria B
  - EN61000-4-3 (Radiated RFI Standards)
    10V/m, 80 to 1000MHz; 80% AM Criteria A
  - EN61000-4-4 (Burst Standards)
    Signal Ports: + / - 4KV; Criteria B
    D.C. Power Ports: + / - 4KV; Criteria B
  - EN61000-4-5 (Surge Standards)
    Signal Ports: + / - 1KV; Line-to-Line; Criteria B
    D.C. Power Ports: + / - 0.5KV; Line-to-earth; Criteria B
  - EN61000-4-6 (Induced RFI Standards)
    Signal Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A
    D.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A
  - EN61000-4-8 (Magnetic Field Standards)
    30A/m @ 50, 60Hz; Criteria A

Environmental Test Compliance:
- IEC60068-2-6 Fc (Vibration Resistance)
  5g @ 10~150KHz, Amplitude 0.35mm (Operation/Storage/Transport)
- IEC60068-2-27 Ea (Shock)
  25g @ 11ms (Half-Sine Shock Pulse; Operation)
  50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)
- IEC60068-2-32 Ed (Free Fall)
  1M (3.281ft.)

Diagrams