

# EX35000 Series

## 8-port Gigabit Industrial Unmanaged Ethernet Switches



### Overview

The EX35000 series Ethernet switches are designed to operate in industrial field environments at the edge of the network. Whether on the factory floor or the control room, the EX35000 will provide flawless communications when you most need it. The EX35000 is a switch with the flexibility of eight Gigabit Ethernet ports that may be configured in various combinations of copper and fiber optic interfaces. It provides six 10/100/1000Base-TX copper ports plus two Gigabit combo ports. This Gigabit combo port means that customers can choose to use either 1000Base-SX/LX interface or 10/100/1000Base-TX interface according to their need. The switch gives priority to the port that is connected or to the optical port if both are connected. Flexibility is the main feature of the EX35000, it may be DIN rail, panel mounted and comes with power options to match the applications that require a tough, environmentally hardened Ethernet switch.

### Features

- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment.
- 8192 MAC addresses
- 1.125M bits buffer memory
- Supports jumbo frame up to 9KB
- 1000Mbps-Full-duplex, 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- Alarms for power failure by relay output
- Redundant power inputs with Terminal Block and DC Jack
- -20°C to 60°C (-4°F to 140°F) operating temperature range
- Hardened aluminum case
- Supports DIN-Rail, Panel Mounted installation

### Ordering Information

|             |                                                                                       |
|-------------|---------------------------------------------------------------------------------------|
| EX35080-00Z | 8-port 10/100/1000Base-TX Industrial Unmanaged Ethernet Switch                        |
| EX35081-0YZ | 7-port 10/100/1000Base-TX + 1-port combo Gigabit Industrial Unmanaged Ethernet Switch |
| EX35082-0YZ | 6-port 10/100/1000Base-TX + 2-port combo Gigabit Industrial Unmanaged Ethernet Switch |

#### Gigabit Options:

(Y) = 3 : 1000Base-SX (SC)  
A : 1000Base-LX (SC) 10Km  
B : 1000Base-LX (SC) 20Km

R : 1000Base-LX (SC) WDM RX:1310nm/RX:1550nm-20Km  
S : 1000Base-LX (SC) WDM RX:1550nm/RX:1310nm-20Km

\*More Gigabit 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-30-24, DR-60-24, DR-75-24, DR-120-24 or 41-136046-X X=1,2,3,4,5**

\*\*Option B - The external power adapter and power cord are not included. Please order the following part numbers, as required: **41-136044-X X=1,2,3,4,5**

\*See page 4-5 to 4-9 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**



## Specifications

### Technology

#### Standards:

- IEEE802.3 10Base-T, 802.3u 100Base-TX/FX, 802.3ab 1000Base-T, 802.3z 1000Base-SX/LX
- IEEE802.3 x Flow Control: Flow control for full-duplex
- IEEE802.1p Queue Priority: Support four priority Queues

#### Forward and Filtering Rate:

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

#### Packet Buffer Memory:

- 1.125M bits

#### Processing Type:

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

#### Address Table Size:

- 8192 MAC addresses

#### Latency:

- 64 Bytes packet length less than 2.9 $\mu$ s
- 1518 Bytes packet length less than 7.9 $\mu$ s

### Power

#### Input:

- Input Voltage: 12 to 32VDC (Terminal Block); 12VDC (DC Jack)

#### Power Consumption:

- 7.2W Max. 0.6A@12VDC, 0.3A@24VDC

#### Power Supply References:

- Terminal Block: 12 to 24VDC, 1.5A
- DC Jack: 12VDC, 3A

#### Overload Current Protection:

- Present

#### Reverse Polarity Protection:

- Present

### Mechanical

#### Casing:

- Aluminum case
- IP20

#### Dimensions:

- 58mm (W) x 110mm (D) x 135mm (H)  
(2.29" (W) x 4.33" (D) x 5.31" (H))

#### Weight:

- 0.8Kg (1.761lbs.)

#### Installation:

- DIN-Rail, Panel Mounting

### Interface

#### Ethernet Port:

- Gigabit: 8 ports (2 Fiber combo ports included)

#### LED Indicators:

- Per Unit: Power Status (Power 1, Power 2, Power 3)
- Per Port: Link/Activity (Green: 10/100Mbps, Orange: 1000Mbps)

#### Alarm Contact:

- One relay output with current 1A @ 24VDC

### Environment

#### Operating Temperature:

- -20°C to 60°C (-4°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

- A.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

- A.C. Power Ports: + / - 2KV; 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

- A.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A

- EN61000-4-8 (Magnetic Field Standards)

- 30A/m @ 50, 60Hz; Criteria A

- EN61000-4-11 (Voltage Dip Standards)

- A.C. Power Ports: 30% Reduction for 0.5 period; Criteria B

### 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

