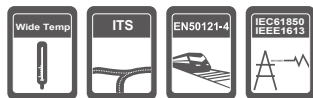


EX47000 Series

IEC61850-3/IEEE1613 Unmanaged Hardened 8-port 10/100BASE Ethernet Switch



Value

- › IEC61850-3 & IEEE1613 compliant
- › EN50121-4 compliant for railway management
- › Redundant power inputs
- › Versatile mounting options



Features

- › Provides flexibility of 4 to 8 10/100BASE-TX ports and 2 100BASE-FX ports
- › Supports 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- › Redundant power inputs(12-48VDC) with Terminal Block and DC Jack(12VDC)
- › Alarms for power and Link Down failure by relay output
- › Supports DIP switch configuration for link down alarm
- › -40°C to 75°C (-40°F to 167°F) operating temperature range, tested for functional operation @ -40°C to 85°C (-40°F to 185°F)
- › Provides DIN-rail or panel mounting
- › Complies with NEMA TS2 Environmental requirements for Traffic control equipment
- › Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- › Complies with IEC61850-3 and IEEE1613 Environmental requirements for power substation automation systems
- › Complies with EN50121-4 environmental requirement for Railway application

Ordering Information

EX47080-00Z	8-port 10/100BASE-TX Hardened Unmanaged Ethernet Switch
EX47062-X0Z	6-port 10/100BASE-TX + 2-port 100BASE-FX Hardened Unmanaged Ethernet Switch
EX47061-X0Z	6-port 10/100BASE-TX + 1-port 100BASE-FX Hardened Unmanaged Ethernet Switch
EX47042-X0Z	4-port 10/100BASE-TX + 2-port 100BASE-FX Hardened Unmanaged Ethernet Switch
EX47041-X0Z	4-port 10/100BASE-TX + 1-port 100BASE-FX Hardened Unmanaged Ethernet Switch

100FX Fiber Options :

(XY) = 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

*More 100FX Fiber Options also available upon

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 requested:

DR-30-24, DR-60-24, DR-75-24, DR-120-24 or 41-136046-X (X)=1: US, 2: EU, 3: UK, 4: AU, 5: JP

**Option B - The external power adapter and power cord are not included, Please order the following part numbers as requested:

41-136044-X (X)=1: US, 2: EU, 3: UK, 4: AU, 5: JP

Installation Type : DIN Rail (mounting kit is included)

Optional Panel mounting kit, Part number: KP-AA96-480



Specifications

Technology	
Standards	IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/FX, IEEE802.3x
Forward and Filtering Rate	14,880pps for 10Mbps 148,810pps for 100Mbps
Packet Buffer Memory	448K bits
Processing Type	- Store-and-Forward - Half-duplex back-pressure and IEEE802.3x full-duplex flow control
Address Table Size	2048 MAC addresses

Power	
Input	Input Voltage: 12VDC (DC Jack); 12 to 48VDC (Terminal Block)
Power Consumption	6W Max. 12VDC @ 0.5A, 24VDC @ 0.25A, 48VDC @ 0.125A
Reverse Polarity Protection	Present

Mechanical	
Casing	Aluminum case
Dimensions	60mm (W) x 125mm (D) x 145mm (H) (2.36" (W) x 4.92" (D) x 5.7" (H))
Weight	1Kg (2.2lbs.)
Installation	DIN-Rail, Panel Mounting

Interface	
LED Indicators	- Per Unit: Power Status: Power 1, 2, 3 (Green), Fault (Red) - Per Port: 10/100TX, 100FX: Link/Activity (Green) 10/100TX: 100 (Green)
Alarm Contact	One relay output with current 1A @ 24VDC

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
EMI	- FCC Part 15, Class A - EN61000-6-4 - EN55022 - EN61000-3-2 - EN61000-3-3
EMS	- EN61000-6-2 - EN61000-4-2 (ESD Standards) Contact: + / - 8KV Air: + / - 15KV - EN61000-4-3 (Radiated FRI Standards) 35V/m, 80 to 3G; 80% AM - EN61000-4-4 (Burst Standards) Signal Ports: + / - 4KV D.C. Power Ports: + / - 4KV A.C. Power Ports: + / - 4KV - EN61000-4-5 (Surge Standards) Signal Ports: + / - 2KV; Line-to-Line D.C. Power Ports: + / - 4KV; Line-to-Earth - EN61000-4-6 (Induced RFI Standards) Signal Ports: 10V @ 0.15 - 80MHz D.C. Power Ports: 10V @ 0.15 - 80MHz A.C. Power Ports: 10V @ 0.15 - 80MHz Earth Ground Ports: 10V @ 0.15 - 80MHz - EN61000-4-8 (Magnetic Field Standards) 1000A/m @ 50, 60Hz - IEC 61000-4-10 (Oscillatory wave magnetic field test) 100kHz and 1MHz: 30A/m - IEC 61000-4-16 (Power frequency immunity test) 50Hz: 300V - IEC 61000-4-18 (oscillatory wave immunity test): 100 kHz, 2.5kV CM and 2.5kV DM 1MHz, 2.5kV CM and 2.5kV DM - IEEE1613: power frequency withstand voltage: 2KV, Insulation resistance >550 MOhm RJ45 Port 500V, Insulation resistance >550 MOhm Impulse voltage: 5kV, Insulation resistance >550 MOhm IEC 60870-2-1: AC/DC power supply voltage variations
Environmental Test Compliance	- IEC60068-2-6 (Vibration Resistance) 5G @ 150Hz; Criterion 3 (Operation/Storage/Transport) - IEC60068-2-27 (Shock) 25G @ 11ms (Half-Sine Shock Pulse; Operation) 50G @ 11ms (Half-Sine Shock Pulse; Storage/Transport) - FED STD 101C Method 5007.1 (Free fall w/ package) -Tested with Cross Weight and Drop High standard table

Diagrams

Unit: mm

