

Industrial Ethernet Switch

SFP to 4*10/100/1000Base-Tx

RoHS Compliant



>>Description

The Industrial Ethernet Switch - Media Converter is designed to provide reliable and stable 10/100/1000BaseT(X) to 1000Base-FX SFP media conversion in harsh industrial environments. It supports redundant power inputs, IP40 protection class and meets EMC industrial level 4 requirements. Its operating temperature ranges from -40 to 85°C. The full load power consumption is as low as 2.5 watts.

The Industrial Ethernet Switch is a "green", embedded industrial Ethernet module with low-power consumption. It is applicable to wind power, subway PIS, power SCADA, sewage treatment, metallurgy, intelligent transportation, rail transit, and many other industries. The Embedded Ethernet Switching Module can be directly installed in the target device.

>>Main Features

- Green Ethernet solution with ultra low power consumption design
- Both standard and wide operating temperature
- Complies with IEEE 802.3, IEEE 802.3u, IEEE802.3z, IEEE802.3ab, IEEE 802.3x auto-negotiation
- Extends distances ranging from 550m (multi-mode fiber) to 120km (single mode fiber)
- Supports auto MDI/MDIX function
- Status LED for easy monitoring of device status
- Supports up to 10K Byte Jumbo frames
- Support 8k MAC address
- IP40 protection class
- FCC Class A & CE approved



>> Specifications

Interface

- 4 x Ethernet port (RJ45) 10/100/1000Base-Tx
- 1 x Optical port (SFP) 1000Base-Fx

Optical Port

- Available for 1310nm and 1550nm Single mode, and 850nm Multi mode
- Transfer Distance: up to 120km
- Connectors: SFP
- Fiber core: 8.3μm, 8.7μm, 9μm and 10μm on single-mode fiber; 50, 62.5 and 100μm on multi-mode fiber

Ethernet Port

- Standard: IEEE802.3, IEEE802.3u, IEEE 802.3ab, IEEE802.3x
- Available speed: force 10Mbps, force 100Mbps, force 1000Mbps and auto-detective 10/100/1000Mbps Full-Duplex and Half-Duplex auto-negotiation
- Connectors: RJ-45 Connector; MDI/MDI-X connection auto-sensing

Switch Properties

- MAC Table: 8K
- Packet Buffer: 1Mbit
- Switching Delay: <5μs

LED Indicators

- Power, Status, Speed, FX Link/Act, TX Link/Act

Power Requirement

- Input: 12VDC~48VDC
- Consumption: MAX 4.5W
- Overload Protection: Support
- Reverse Connection Protection: Support
- Redundancy Protection: Support

Physical Characteristics

- Housing: Metal enclosure
- Protection Class: IP40
- Dimensions: 36 x 120 x 103mm
- Weight: 0.42kg
- Installation: DIN-Rail or Panel mounting

Environmental Limits

- Operating Temperature: -40°C to 85°C
- Storage Temperature: -40°C to 85°C
- Operating Humidity: 10% to 95% RH (non-condensing)
- Storage Humidity: 5% to 95% RH (non-condensing)

Agency Approvals

- FCC Part 15 of Class A & CE approved

Industrial Standard

- EMI: FCC/CE/LVD/EMC
- EMS:
 - IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)
 - IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)
 - IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV
 - IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV
 - IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
 - IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)
- Shock: IEC 60068-2-27
- Free Fall: IEC 60068-2-32
- Vibration: IEC 60068-2-6

Warranty

- 1 year

>> Mechanical Drawing

