

# **INDUSTRIAL MEDIA CONVERTER**



## PD2-H02-FL20-1000I

1000BASE-Fx to 10/100/1000Base-Tx

## **DESCRIPTION**

- The PD2-H02-FL20-1000l industrial Gigabit media converters are designed to provide reliable and stable 10/100/1000BaseT(X) to 1000Base-FX SFP media conversion in harsh industrial environments. PD2-H02-FL20-1000l supports redundant power inputs, IP40 protection class and meets EMC industrial level 4 requirements. Its operating temperature ranges from -40 to 85°C. Belonging to Terrabit Ethernet switches series, PD2-H02-FL20-1000l full load power consumption is as low as 2.5 watts.
- PD2-H02-FL20-1000I 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. PD2-H02-FL20-1000I 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
- o 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**

**Ethernet Port** 

**Switch Properties** 

Interface1 x Ethernet port (RJ45) 10/100/1000Base-Tx

1 x Optical port 1000Base-Fx

Optical Port
Available for 1310nm and 1550nm Single mode, and 850nm Multi mode

Transfer Distance: up to 120km

Connectors: LC or SC

Fiber core: 8.3μm, 8.7μm, 9μm and 10μm on single-mode fiber; 50, 62.5 and 100μm on multi-mode fiber

Standard: IEEE802.3, IEEE802.3u, IEEE 802.3ab, IEEE802.3x

Available speed: force 10Mbps, force 100Mbps and auto-detective 10/100/1000Mbps

Full-Duplex and Half-Duplex auto-negotiation

Connectors: RJ-45 Connector; MDI/MDI-X connection auto-sensing

MAC Table: 8K Packet Buffer: 1Mbit

Switching Delay: <5µs

LED Indicators
Power, Status, Speed, FX Link/Act, TX Link/Act

• Power Requirement Input: 220AC, 50-60Hz Consumption: MAX 4.5W

Overload Protection: Support Reverse Connection Protection: Support

 Physical Characteristics
Redundancy Protection: Support 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)



# **INDUSTRIAL MEDIA CONVERTER**

Agency Approvals

FCC Part 15 of Class A & CE approved

Industrial Standard
EMI: FCC/CE/LVD/EMC

EMS: IEC61000-4-2 (ESD):  $\pm 8kV$  (contact),  $\pm 15kV$  (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;

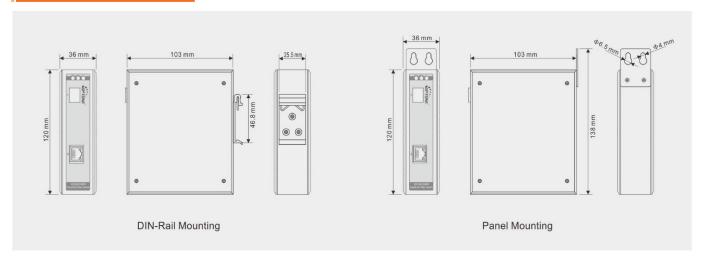
Data Port: ±2kV

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

### **MECHANICAL DRAWING**



### ORDERING INFORMATION

The PD2-H02-FL20-1000l
1000Base-Fx to 10/100/1000Base-Tx, wavelength 1310nm, single fiber upto 20Km

## **IMPORTANT NOTICE**

- Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by Terrabit before they become applicable to any particular order or contract. In accordance with the Terrabit policy of continuous improvement specifications may change without notice.
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