



## Product Data Sheet

# MC250-1T/1S

## Fast Ethernet to SFP Industrial Media Converter

### Overview

The IFS Fast Ethernet to SFP Industrial Media Converter is designed for the most demanding IP network applications offering the flexibility of SFP technology for optimizing network performance with wide operating temperature range.

### SFP Technology

The IFS MC250-1T/1S converts a 10/100Base-TX Ethernet on copper to 100Base-X fiber via Small Form-format Pluggable (SFP) technology. This media converter can be custom configured to your exact system design specifications by utilizing a variety of IFS SFP Mini-GBIC modules. IFS SFP Mini-GBIC modules are available in a variety of versions from multi-mode or single mode fiber, 1 or 2 fibers and wide-temperature versions.

### Robust Hardened Design

With an IP-30 rated enclosure, the IFS Fast Ethernet to SFP Industrial Media Converter provides a high level of immunity against electromagnetic (EMI) and radio-frequency (RFI) interference typically found in industrial environments. This media converter complies with IEC60068-2-xx standards for free-fall, shock, and vibration and operates in -40°C to 75°C temperatures found in difficult environments such as factory floors or in curb side traffic control cabinets.



### Standard Features

- 10/100Base-TX
- Complies with IEEE 802.3, IEEE 802.3u
- Auto-negotiation and MDI/MDI-X
- 10/100Base-TX: 2-pair Cat. 5e/6 UTP cable, up to 100 meters
- SFP (Mini-GBIC) Port
- Robust Hardened Design
- DIN-rail or wall-mounting
- 12 ~ 48VDC, redundant power with reverse-polarity protection
- Alarm relay output for port breakdown and power-failure alert
- Complies with IEC60068-2-xx standards for free-fall, shock and vibration
- Voltage/surge-suppression
- Wide operating temperature range of -40°C ~ +75°C

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### Specifications

#### Ethernet

- Data Rate: 10/100Base-TX port
- Throughput (packet per second): 148,800pps
- Switch Architecture: Store-and-forward
- Max Packet Size: 1522 Bytes
- Flow Control: Back Pressure for Half Duplex, Mode Pause for Full-Duplex Mode IEEE 802.3x
- Connector: RJ-45 (Auto-MDI/MDI-X)
- Electro Static Discharge (ESD) Protection: 6KVDC
- Cable Type and Distance: 10Base-T: 2-pair UTP Cat. 3,4,5, up to 100 m (328 ft.), 100Base-TX: 2-pair UTP Cat. 5e, up to 100 m (328 ft.)

#### Fiber

- Data Rate: 100Base-FX/BX/LX 802.3u
- Connector: SFP (Mini-GBIC) port
- Fiber Type and Distance: Varies by SFP module

#### LED Indicators & Controls

- Power/Status: Green/On – power
- Power Fault Proper Operation –Off; Fault: Green
- 10/100Base-TX port: Green/On – active port (TX/RX)
- SFP (Mini-GBIC) port link: Green/On – link established
- Reset button: Reset to factory default settings

#### Electrical & Mechanical

- Power (Redundant with reverse polarity protect function): 12 ~ 48VDC, .65A (3W Max.)
- Electrical Fast Transient (EFT) Protection: 6KVDC
- Alarm: Provides one relay output for power failure notification Alarm relay maximum current: 1A @ 24VDC
- Power and Alarm Fault Connector: 6-pin removable screw terminal
- Enclosure: IP30 rated metal enclosure
- Dimensions (H x W x D): 5.31 x 1.26 x 3.46 in. (135 x 32 x 88mm)
- Weight: 0.95 lbs. / 430 grams

#### Environmental

- Operating Temperature: -40°C ~ +75°C
- Storage Temperature: -40°C ~ +85°C
- Relative Humidity: 0% ~ 90% (non-condensing)
- MTBF: > 100,000 hrs @ 25°C

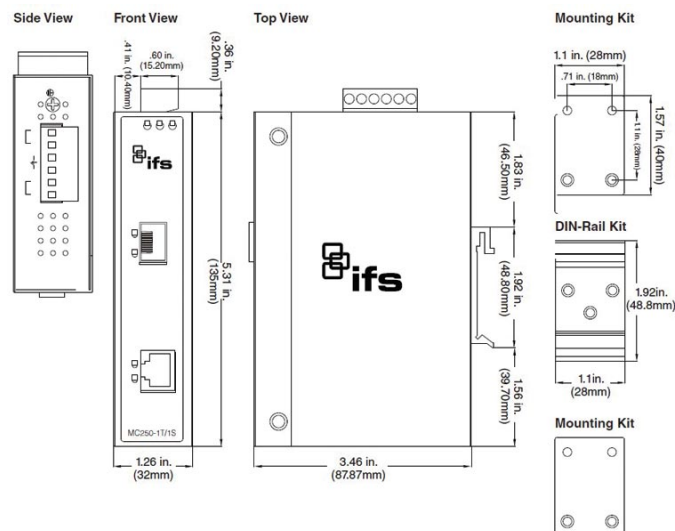
#### Standards Compliance

- IEEE: IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX /100Base-FX, IEEE 802.3x
- EMI: EN 55022 CLASS A, EN61000-3-2:2006, EN61000-3-3: 1995+1A:2001+A2:2005
- EMS: EN 55024:1998+A1:2001, IEC 61000-4-2:2001, IEC 61000-4-3:2008, IEC 61000-4-4:2004, IEC 61000-4-5:2005, IEC 61000-4-6:2008, IEC 61000-4-8:2001
- Stability: IEC60068-2-32(Free fall) IEC60068-2-27(Shock) IEC60068-2-6(Vibration)

#### Accessories

- SFP : S20 Series
- SFP : S25 Series (wide-temp)
- 613P-EU: 100-240V AC Input 13.5V DC 1.3Amp Output Power Supply Brick model EU plug
- 613P-UK: 100-240V AC Input 13.5V DC 1.3Amp Output Power Supply Brick model UK plug
- PS48VDC240W-EU: 100-240V AC Input 48V DC 5A Output Power Supply Hardened Brick model with EU plug
- PS48VDC240W-UK: 100-240V AC Input 48V DC 5A Output Power Supply Hardened Brick model with UK plug

### Diagram



### Ordering Information

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