



MC250-4T/1FS

4-Port Ethernet to Fiber Industrial Media Converter

Overview

IFS Ethernet to Fiber Industrial Media Converters offer four 10/100Mbps Ethernet ports and 100Base-FX transmission on either multi-mode or single mode optical fiber for optimum bandwidth usage. Specifically designed for stable and reliable operation in electrically harsh and climatically demanding environments, the module's slim, IP-30 standard metal case accommodates DIN-rail or wall mounting for efficient installation in multiple applications.

These converters are engineered with a high-performance switch architecture capable of providing a non-blocking switch fabric and wire-speed throughput as high as 1Gbps or 1.2Gbps. With its 2K MAC address table, these media converters offer wire-speed packet transfer performance without the risk of packet loss. The Flow Control function allows these modules to deliver fast and reliable data transfer. Available in multi-mode or single-mode configurations, the converters deliver distances of up to 2km or 15km respectively.

Providing extended distance Ethernet transmission, these units are well suited for remotely deployed edge devices such as IP cameras, access control, VoIP and wireless access points. IFS also provides a multi-mode dual-fiber version for drop and repeat network topologies.



Details

- 4 RJ-45 Ports 10/100Base-TX
- Auto MDI/MDI-X
- Auto-negotiation
- 1 Fiber Port 100Base-FX MM or SM Fiber
- Complies with the IEEE 802.3, IEEE 802.3u, Fast Ethernet standard
- Store-and-Forward switching architecture with wire-speed filtering and forwarding rates
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x PAUSE frame-flow control (full-duplex)
- Robust Hardened Design
- Provides either DIN-rail or wall-mounting
- 12 ~ 48VDC, redundant power with reverse-polarity protection
- Voltage/surge-suppression
- Complies with IEC60068-2-xx standards for free-fall, shock and vibration
- Wide operating temperature range of up to -40°C ~ +75°C

MC250-4T/1FS

4-Port Ethernet to Fiber Industrial Media Converter

Technical specifications

General

Category	Industrial
Type	Ethernet to Fixed Optics
Switch throughput (Mpps)	0.744
Mac table	2 K
Fault relay output	Yes

Connections

No. of ports	4
Port speed	Fast
Port type	10/100
Fiber port	1
Fiber port type	Single Mode
Fiber port speed	100Base FX
Fiber distance	15 km
Fiber connector	SC
Wavelength	1310 nm

Electrical

Power supply type	12 to 48 VDC
Power supply value	Redundant power with polarity-reverse protection function
Power consumption	9 W, 31 BTU max.
PoE	No

Physical

Physical dimensions	135 x 87 x 32 mm, 5.31 x 3.42 x 1.26 in. (W x D x H)
Net weight	437 g, 0.965 lbs
Switch fabric	1 Gbps
Mounting type	DIN-rail, Wall mount

Environmental

Operating temperature	-40 to +75°C
Storage temperature	-40 to +85°C
Relative humidity	0 to 90% noncondensing
IP rating	IP30
MTBF	>100,000 h @ 25°C

RJ45 Ports

10/100Base-TX Connectors	RJ-45 (4); Auto-negotiate and Auto MDI/MDI-X support
Throughput (packet per second)	148,800pps
Switch Architecture	Store-and-forward
Max Packet Size	1522 Bytes
Electro Static Discharge (ESD) Protection	6KVDC

Fiber Ports

100Base-FX SC Connectors	1
Optical Fiber Type	Single-mode (9/125µm)
Optical Distance	15 km

Optical

Optical Wavelength	1310 nm
TX Launch Power (dBm)	Max:0, Min: -20
Receiver Sensitivity (dBm)	32
Maximum Input Power (dBm)	0

Switch performance

Switch Architecture	Store-and-Forward
Switch Fabric	1 Gbps / non-blocking
Throughput (Packet per second)	0.744 Mpps @ 64bytes
Address Table	2K entries
Shared Data Buffer	1 Mbit on-chip frame buffer
Maximum Frame Size	1522 Bytes packet
Flow Control	Back pressure for Half-Duplex, IEEE 802.3x PAUSE Frame for Full-Duplex

LED Indicators

Power	Power input 1 - Green; Power input 2 - Green
Power Fault	Proper Operation - Off; Fault - Green
RJ-45 (10/100Mbps)	100Mbps Activity - Green; 10Mbps Activity - Off
Fiber (100Base-FX)	Connected to network - Green
Optical Link	Link established - Steady Green; TX/RX Activity - Blinking green

Electrical & Mechanical

Electrical Fast Transient (EFT) Protection	6 kVDC
Power and Alarm Fault Connector	6-pin removable screw terminal
Alarm Fault Relay	Provides one relay output for power failure notification; 24VDC - 1A max.
Enclosure	IP-30 slim-type metal enclosure

Standards Compliance

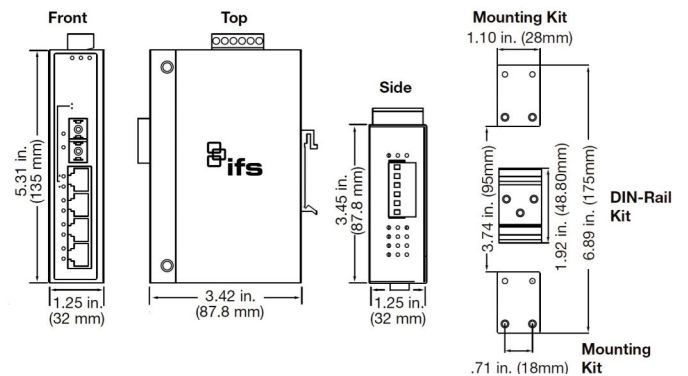
IEEE Standards	IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX /100Base-FX, IEEE 802.3x Flow Control and Back pressure
IEC Standards	IEC60068-2-32(Free fall) IEC60068-2-27(Shock) IEC60068-2-6(Vibration)
EIA/TIA-568 Standards	2-Pair UTP Cat. 3, 4, 5 (100meters, max.) EIA/TIA-568 100-ohm STP (100meters, max.)
Regulation	FCC Part 15 Class A, CE

MC250-4T/1FS

4-Port Ethernet to Fiber Industrial Media Converter

Compatible products

Category	Reference	Description
Power Supplies	PS48VDC240W-DIN	48 VDC, 240 W, power supply with DIN rail mount



As a company of innovation, Kidde Global Solutions reserves the right to change product specifications without notice. For the latest product specifications, visit firesecurityproducts.com online or contact your sales representative.

Last updated on 25 January 2024 - 10:45