



## Product Data Sheet

# MC201-1P/1FS

Fiber to Ethernet Media Converter with PoE Injector

### OVERVIEW

The IFS Fiber to Ethernet Media Converters with PoE Injectors provide a cost-effective solution for deploying remote PoE powered edge devices with optical fiber.

Ethernet data can be transmitted up to 15km to a remote location depending on model and optic fiber used. At the remote location, the module can be installed near a power source and injects 48VDC PoE power to transmit simultaneously with the Ethernet data over Category network cable for the last 100 meters to the remote PoE edge device.

In addition, these modules utilize a high performance Store-and-Forward architecture with IEEE 802.3x Flow Control (Full-Duplex) preventing packet loss. With the LFP (Link Fault Pass-through) function (LLCF/LLR) enabled, the module also provides an efficient method of alerting network administrators of any link problems.

These modules are an inexpensive and efficient way to eliminate extra AC wiring and reduce the need for dedicated electrical outlets in walls, ceilings or any unreachable place, providing optimized power management for IP-based surveillance cameras, wireless access points (WAP) or any remote network edge device application.



### Standard Features

- 10/100Base-TX
- Complies with IEEE 802.3, IEEE 802.3u
- Auto-negotiation and MDI/MDI-X
- Store-and-Forward architecture
- Supports maximum frame size to 1600bytes
- IEEE 802.3x full-duplex flow control, back pressure in half-duplex to eliminate packet loss
- Protects non-PoE devices if accidentally connected
- 100Base-FX Fiber
- Multi-mode or single mode versions
- Distances up to 15km
- Plug-and-play installation
- Auto Loop Back Test function
- LED indicators offer simple network diagnosis
- Link Fault Pass through function for remote alarm notification

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## Fiber to Ethernet Media Converter with PoE Injector

### Specifications

#### Ethernet

- Data Rate  
10/100Base-TX with Auto-negotiate (IEEE 802.3 / 802.3u)
- Throughput (packet per second)  
148810pps @ 64Bytes
- Switch Architecture  
Store-and-Forward
- Flow Control  
"Back pressure for Half-Duplex mode  
Pause from for Full-Duplex mode (IEEE 802.3x)"
- Connector  
RJ-45 with Auto-MDI/MDI-X and PoE injector function
- Cable Type and Distance  
10Base-T (Cat 3, 4, 5e) or 100Base-TX (Cat 5e) – 328ft (100m)

#### Fiber

- Data Rate  
100Base-FX
- Connector  
SC
- Fiber Type  
Single mode (9/125μm)
- Distance  
Up to 15km

#### Optics

- Wavelength  
1310nm
- Launch Power (dBm)  
Max. -7; Min. -20
- Receive Sensitivity  
-28
- Maximum Input Power  
-28

#### Power over Ethernet (PoE) Injector

- PoE Standard  
IEEE 802.3af
- Power PIN Assignment  
(+) Pins 1 & 2; (-) Pins 3 & 6
- Power Output (Max. 1 PoE Device)  
PoE 48 VDC, Max. 15.4 watts, 350mA

#### LED Indicators

- Power/Status  
On - Green
- 10/100Base-T Link  
Data Activity - Green
- 100Base-FX Link  
Data Activity - Green
- PoE in Use  
Detection of PSE Device - Green

#### LFP Mode Switch

- On  
If either TX or FX port is faulty, disable other port
- Off  
Active link LED will still operate if other port is faulty

#### Electrical & Mechanical

- Power  
48V DC @ 0.38A
- Enclosure  
Metal
- Dimensions (H x W x D)  
1.02 x 2.76 x 3.82 in. (26 x 70 x 97 mm)
- Weight  
0.44 lbs/200g

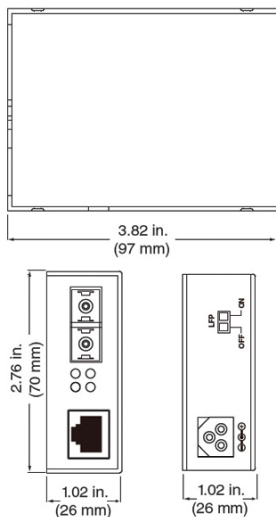
#### Environmental

- Operating Temperature  
0° ~ 50°C
- Storage Temperature  
-20° ~ 70°C
- Relative Humidity  
0% ~ 90% (non-condensing)

0% ~ 90% (non-condensing)

- 0% ~ 90% (non-condensing)  
0% ~ 90% (non-condensing)

### Diagram



### Ordering Information

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