

Fiber to Ethernet Media Converters 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

Ethernet

- 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

Power over Ethernet (PoE)

- Complies with IEEE 802.3af
- Inserts 48 VDC (15.4w) power on Category network cable
- Protects non-PoE devices if accidentally connected

Fiber

- 100Base-FX
- Multi-mode or single mode versions
- Distances up to 15km

Installation & Diagnostics

- Plug-and-play installation
- Compact size
- Auto Loop Back Test function
- LED indicators offer simple network diagnosis
- Link Fault Pass through function for remote alarm notification

Warranty

- 3-year warranty

Fiber to Ethernet Media Converters with PoE Injector

North America
T 855-286-8889

Asia
T 852-2907-8108

Australia
T 61-3-9239-1200

Europe
T 32-2-725-11-20

Latin America
T 561-998-6114

Specifications

| Ethernet | Description |
|--------------------------------|---|
| 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 | MC100FX-TX-PoE | MC201-1P/1FS |
|------------|--|-----------------------|
| Data Rate | 100Base-FX | 100Base-FX |
| Connector | SC | SC |
| Fiber Type | Multi-mode (50/125µm or 62.5/125µm) | Single mode (9/125µm) |
| Distance | Up to 2km using OM1 & OM2 multi-mode fiber | Up to 15km |

| Optics | | |
|---------------------|----------------------|-------------------|
| Wavelength | 1300 nm | 1310nm |
| Launch Power (dBm) | Max. -14; Min. -19.0 | Max. -7; Min. -20 |
| Receive Sensitivity | -34.5dBm | -28 |
| Maximum Input Power | -14dB | -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 |

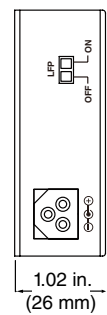
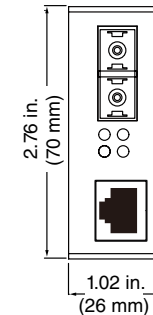
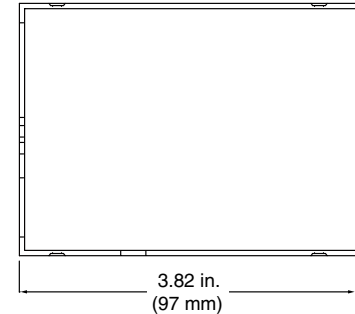
| LFP Mode Switch | |
|-----------------|--|
| On | If either TX or FX port is faulty, disable other port |
| Off | Active link LED will still operate if other port is faulty |

| 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) |

| Standards Compliance | |
|----------------------|-------------------------|
| Regulation | FCC Part 15 Class A, CE |

Dimensional Diagrams



Agency Compliances

- FCC
- CE



Ordering Information

| | |
|----------------|--|
| MC100FX-TX-PoE | Fiber (MM) to Ethernet Media Converter with PoE Injector |
| MC201-1P/1FS | Fiber (SM) to Ethernet Media Converter with PoE Injector |

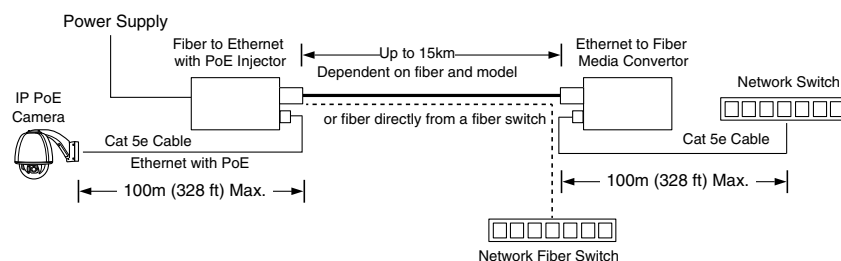
Note: External power supply must be purchased separately.

Accessories

| | |
|----------------|--------------------------------------|
| PS48VDC.38A-US | 48VDC .38A Wall Mounted Power Supply |
|----------------|--------------------------------------|

Note: Use "-UK" or "-EU" suffix for UK or European type power supply plug respectively.

Typical Application



interlogix.com
utcfireandsecurity.com

Specifications subject to change without notice.

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