

# 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

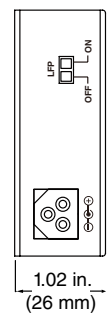
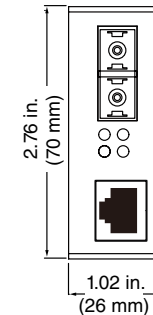
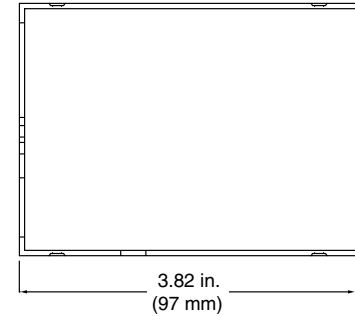
LFP Mode Switch	
On	If either TX or FX port is faulty, disable other port
Off	Active link LED will still operate if other port is faulty

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

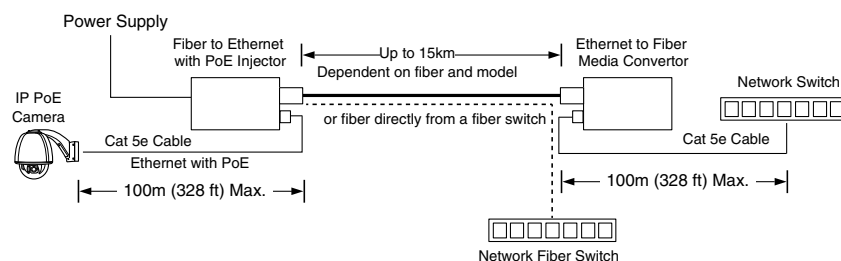
Note: External power supply must be purchased separately.

## Accessories

PS48VDC.38A-US	48VDC .38A Wall Mounted Power Supply
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Note: Use "-UK" or "-EU" suffix for UK or European type power supply plug respectively.

## Typical Application



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utcfireandsecurity.com

Specifications subject to change without notice.

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