Overview

GE’s Fiber to Ethernet and PoE Injector is now IFS. The IFS Fiber to Ethernet Media Converter and PoE Injector provides an effective solution for deploying remote PoE powered edge devices with optical fiber. 100Mbps Ethernet data can be transmitted up to 2km over multi-mode optical fiber to a remote location. At the remote location, the module can be installed near a power source and inject 48VDC PoE power to transmit simultaneously with 10/100Mbps Ethernet data over Category network cable for the last 100 meters to the remote PoE edge device.

In addition, this module utilizes 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.

This module is 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 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
- 62.5μm or 50μm multi-mode fiber
- Distances up to 2km

Installation & Diagnostics
- Plug-n-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
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-T (Cat 5e) – 328ft (100m)

Fiber
- Data Rate: 100Base-FX
- Connector: SC
- Fiber Type and Distance: Multi-mode 50/125μm or 62.5/125μm – Up to 2Km

Optics
- Wave-length: 1310 nm
- Launch Power: Min. -19.0dBm; Max. -14dBm
- Receive Sensitivity: -34.5dBm
- Maximum Input Power: -14dB

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

Standard Compliance
- Regulation: FCC Part 15 Class A, CE

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): 3.82 x 2.76 x 1.02 in. (9.7 x 7.0 x 2.6 cm)
- Weight: 0.44 lbs/200g

Environmental
- Operating Temperature: 0ºC – 50ºC
- Storage Temperature: -20ºC – 70ºC
- Relative Humidity: 0% – 90% (non-condensing)

Ordering Information
- MC100Fx-Tx-PoE Fiber to Ethernet Media Convertor and PoE Injector

Note: External power supply must be purchased separately.

Typical Application

Security Products by GE are now part of the UTC Fire & Security family