



# 100Base-FX to 10/100Base-TX PoE Media Converter



### Fiber Media Converter with a Power over Ethernet Injector

PLANET's FTP-80x series is the best data link and power sourcing solution for long reach network deployment that utilize the networking technologies of:

- Media Conversion : 100Base-FX to 10/100Base-TX
- · Power over Ethernet : Power Sourcing Equipment (PSE), PoE Injector

The device utilizes both PoE and fiber-optic interfaces. It is ideal for service providers, campuses and public areas seeking to deploy the PoE for wireless access points, IP-based surveillance cameras or IP phones in any places easily, efficiently and cost effectively.

### Optimial Installation and Power Management of Network Devices

The IEEE 802.3af capabilities of the FTP-80x reduces installation costs for many of the new network productivity devices. As an IEEE 802.3af compliant Power over Ethernet Injector, the FTP-80x provides 48V DC over Ethernet cables. It allows the twisted pair cable between the FTP-80x and the IEEE 802.3af compliant PD (Powered Device) or PoE Splitter (such as the POE-151S with 5V/12V) to simultaneously transfer data and power.

### Fiber-optic Link Capability Extends the Range of Network Deployments

The maximum distance between the PoE PSE (Power Sourcing Equiptment) and PD (Powered Device) is 100 meters. The FTP-80x is integrated with fiber interface to extend the network device deployment range. PLANET's FTP-80x series is ideal for networks requiring the conversion of fiber to copper with PoE support. The FTP-80x converts a 10/100Base-TX signal to a 100Base-FX signal and provides diverse fiber connection types to meet different network applications. Some models on the FTP-80x Series can be extended up to 15 kilometers and maintain its transmission performance that can reach up to 100Mbps. The device utilizes a high-performing Store and Forward mechanism; it also prevents packet loss with IEEE's 802.3x flow control (full-duplex). Its intergrated LFP (Link Fault Pass-through function) (LLCF/LLR) and DIP switch design can immediately alarm administrators about problems that the link media encounters and provides an efficient solution to monitor the network. The DIP switch disables or enables of the LFP function.

### Features

- Complies with IEEE 802.3, IEEE 802.3u 10/100Base-TX, 100Base-FX, IEEE 802.3af Power Over Ethernet standard
- Auto-negotiation for 10/100Base-TX half duplex mode or full duplex mode, auto MDI/MDI-X function on copper port
- IEEE 802.3x full duplex flow control, back-pressure in half duplex eliminate packets loss
- Provides DC 48V power over RJ-45 Ethernet cable to device with Ethernet port
- Auto-detects POE IEEE 802.3af equipment; protects devices from being damaged by incorrect installation
- 100Base-FX interface for up to 2km (multi-mode fiber 50µm/125µm, 62.5µm/125µm) on FTP-802
- 100Base-FX interface for up to 15km (single-mode fiber 9μm/125μm) on FTP-802S15
- DIP-switch: LFP (Link Fault Pass-through) mode selection
- · Compact in size, easy installation
- · LED indicators for easy network diagnostics



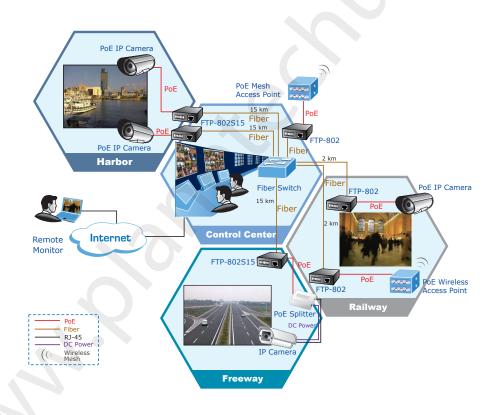
### Advantages of Combined PoE and Media Conversion

With data, long reach fiber capability, and its PoE function, the FTP-80x reduces cables and eliminates the need for dedicated electrical outlets that are hard to reach or absent. It frees the deployment of a security IP camera and wireless AP from the restrictions of having to find nearby power outlets. Power and data switching are integrated into one unit and are delivered via a single cable, eliminating costs for additional AC wiring and reducing installation time.

### **Product Applications**

### The IEEE 802.3af Equipment Installation

The FTP-80X provides the easiest way to power your Ethernet devices such as PLANET IEEE 802.3af Power over Ethernet Splitter (POE-151S / 152S) with a non-PoE Internet camera or wireless PoE access point (IAP-2000PE). For example, security IP cameras, wireless access points and other IEEE 802.3af compliant network equipment can easily be installed in a public area such as a station or freeway for surveillance purposes, or wireless roaming environments such as a campus or airport.





## Specifications

| Product                            | FTP-802 & FTP-802S15  |
|------------------------------------|---|
| Interface                          |   |
| Copper                             | 1-port Fast Ethernet TP interface, auto negotiation, auto MDI/MDI-X with PoE injector function  |
| Fiber                              | Multi-mode: 50/125 μm or 62.5/125 μm optical fiber<br>Single-mode: 8.3/125, 8.7/125, 9/125 μm optical fiber   |
| Fiber Port Type (connector)        | FTP-802 : SC<br>FTP-802S15 : SC   |
| Cable Distance                     | FTP-802 : 2km<br>FTP-802S15 : 15km  |
| Optical Frequency                  | FTP-802 : 1310nm<br>FTP-802S15 : 1310nm   |
| Launch Power(dBm)                  | FTP-802 : max14 Min19.0   FTP-802S15 : max7 Min20   |
| Receive Sensitivity                | FTP-802 : -34.5<br>FTP-802S15 : -28   |
| Maximum Input power                | FTP-802 : -14<br>FTP-802S15 : -8  |
| Power Over Ethernet                |   |
| PoE Standard                       | IEEE 802.3af Power over Ethernet  |
| Power Output                       | PoE 48V DC, max. 15.4 watts, 350mA  |
| Power Pin Assignment               | 1/2(+) , 3/6(-)   |
| Hardware Specifications            |   |
| Switch Architecture                | Store-and-Forward   |
| Flow Control                       | Back pressure for half duplex mode<br>IEEE 802.3x pause frame for full duplex mode  |
| LED                                | System: Power, Status<br>FX / LNK: Data Active, Fiber Link.<br>TX / LNK: 10/100 Link/Active<br>PoE in Use: Detects PSE Device.                          |
| Dimensions (H x W x D)             | 26 x 70 x 97mm  |
| Weight                             | 0.2 kg  |
| Power Supply                       | 48V DC, 0.4A external AC-to-DC adapter  |
| Temperature                        | 0~50 degrees C  |
| Operating Humidity                 | 5~90%(non-condensing)   |
| LFP mode                           | Enable: Either TP port or FX port is broken, shut down the other port<br>Disable: Link LED indicators still on if connection of the other end is broken |
| Standards Conformance              |   |
| Regulation Compliance              | FCC Part 15 Class A, CE   |
| Protocols and Standards Compliance | IEEE 802.3 Ethernet<br>IEEE 802.3u Fast Ethernet<br>IEEE 802.3x Flow Control<br>IEEE 802.3af Power over Ethernet  |
| Cables                             | TP: Cat 5/5e UTP cable<br>Fiber: Multi-mode: 50/125 μm or 62.5/125 μm optical fiber<br>Single-mode: 8.3/125, 8.7/125, 9/125 μm optical fiber            |

# **Ordering Information**

| FTP-802    | 100Base-FX to 10/100Base-TX PoE Media Converter (SC,MM)-2km  |
|------------|--|
| FTP-802S15 | 100Base-FX to 10/100Base-TX PoE Media Converter (SC,SM)-15km |

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C-FTP-802 / FTP-802S15

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