

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



*More than a Fiber Media Converter - a Power over Ethernet Injector as well  
The best data link and power sourcing solution for long reach network equipment*

PLANET FTP-80x series is ideal for remote network equipment deployments, using two networking technologies

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

Providing both PoE and fiber-optic interfaces, the FTP-80x is ideal for service providers, campuses and public areas requiring to deploy the PoE for wireless access points, IP-based surveillance cameras or IP phones in any places easily, efficiently and cost effectively.

## *PoE Optimizes the Installation and Power Management of Network Devices*

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

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

The maximum distance between the PoE PSE and PD is 100 meters. To extend the network device deployment range, the FTP-80x is integrated with fiber interface. The FTP-80x PoE Media Converter is used to convert optical Ethernet signal to electrical Ethernet signal that allows two type of segments connect easily, efficiently and inexpensively. It can convert 10/100Base-TX signal to 100Base-FX signal and provides the diverse fiber connecting types of options to meet different network applications. By selectable model, the maximum networking distance can extend to as long as 15 kilometers and still sustain the transmission performance as high as 100Mbps. It works in high performance Store and Forward mechanism; it also can prevent packet loss with IEEE 802.3x flow control (full-duplex). With the LFP (Link Fault Pass-through function) (LLCF/LLR) and the DIP switch design, it can immediately alarm administrators the problem of the link media and provide efficient solution to monitoring the net. The DIP switch provides the disabling or enabling 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 50 $\mu$ m/125 $\mu$ m, 62.5 $\mu$ m/125 $\mu$ m) on FTP-802
- 100Base-FX interface for up to 15km (single-mode fiber 9 $\mu$ m/125 $\mu$ m) on FTP-802S15
- DIP-switch: LFP (Link Fault Pass-through) mode selection
- Compact in size, easy installation
- LED indicators for easy network diagnostics

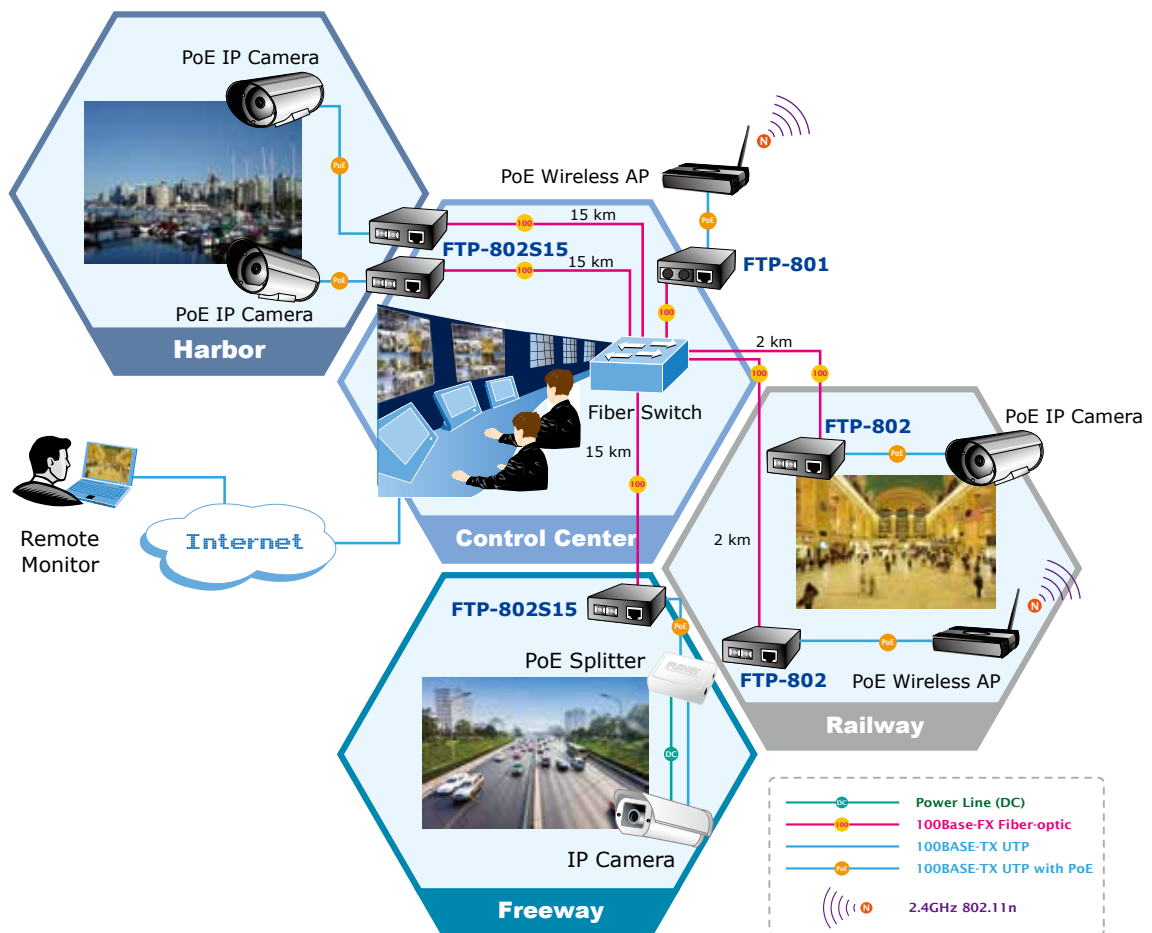
*Advantage of Combined PoE and Media Conversion*

With data, long reach fiber capability and PoE from one unit, the FTP-80x will reduce cables and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. It frees the security IP camera and wireless AP deployment from restrictions due to power outlet locations. Power and data switching are integrated into one unit and delivered over 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 non PoE Internet camera or wireless PoE access point (IAP-2000PE). For instance, security IP camera, wireless access point and other IEEE 802.3af compliant network equipment can be easily installed around the corner in the public area such as station or freeway for surveillance demands, or wireless roaming environment in the campus or airport can be set up.



## Specifications

Product	FTP-802 & FTP-802S15	
<b>Interface</b>		
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 Single-mode: 8.3/125, 8.7/125, 9/125 μm optical fiber	
Fiber Port Type (connector)	FTP-802 : SC FTP-802S15 : SC	
Cable Distance	FTP-802 : 2km FTP-802S15 : 15km	
Optical Frequency	FTP-802 : 1310nm FTP-802S15 : 1310nm	
Launch Power(dBm)	FTP-802 : max.-14    Min.-19.0 FTP-802S15 : max. -7    Min.-20	
Receive Sensitivity	FTP-802 : -34.5 FTP-802S15 : -28	
Maximum Input power	FTP-802 : -14 FTP-802S15 : -8	
<b>Power Over Ethernet</b>		
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(-)	
<b>Hardware Specifications</b>		
Switch Architecture	Store-and-Forward	
Flow Control	Back pressure for half duplex mode IEEE 802.3x pause frame for full duplex mode	
LED	System: Power, Status FX / LNK: Data Active, Fiber Link. TX / LNK: 10/100 Link/Active 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 Disable: Link LED indicators still on if connection of the other end is broken	
<b>Standards Conformance</b>		
Regulation Compliance	FCC Part 15 Class A, CE	
Protocols and Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3x Flow Control IEEE 802.3af Power over Ethernet	
Cables	TP: Cat 5/5e UTP cable Fiber: Multi-mode: 50/125 μm or 62.5/125 μm optical fiber 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