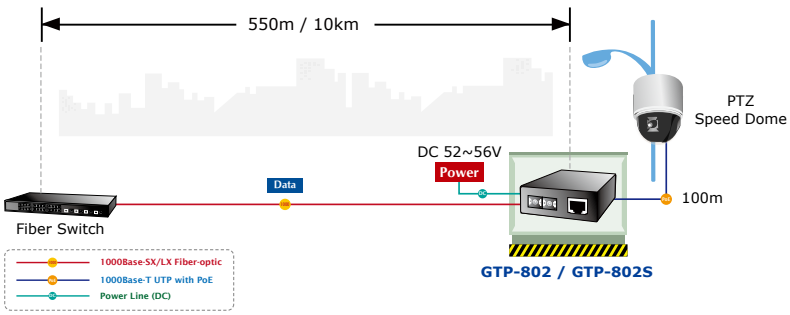
1000Base-X to 10/100/1000Base-T 802.3at PoE Media Converter

The Best Data Link and Power Sourcing Solution

As more and more PoE powered devices need higher power input and long distance transmission, PLANET has released a new Power over Ethernet Media Converter, GTP-80x series. With the brand-new IEEE 802.3at High Power over Ethernet technology applied, the GTP-80x series provides the following key features:

- IEEE 802.3at / IEEE 802.3af PoE standard compliance
- Supports a maximum of 30W output power
- 10/100/1000Mbps duplex mode supports on 1000Base-T port
- 1000Mbps fiber-optic support

The GTP-80x series is a Single-Port, Mid-Span IEEE 802.3at High Power over Ethernet converter designed specifically to satisfy the growing demand for higher power required network equipment such as PTZ (Pan, Tilt & Zoom) network cameras, PTZ speed dome, color touch-screen VoIP telephones, multi-channel (IEEE 802.11a / b / g / n) wireless LAN access points and other network devices that need higher power to function normally. The GTP-80x series High Power over Ethernet converter is an ideal solution to delivering data and power to network devices directly via the RJ-45 port interface without the need of installing extra power outlets and electrical cabling.



Interface

- 1-Port RJ-45 interface
  - 1-Port Data + Power output
- 1-Port Fiber Optic
  - GTP-802: SC Fiber Interface
  - GTP-802S: SC Fiber Interface
  - GTP-805A: LC Fiber Interface
- DC 52V power input socket

PoE

- Complies with IEEE 802.3af standard and IEEE 802.3at standard, Mid-Span PSE
- Provides DC 52V power over RJ-45 Ethernet cable to devices with Ethernet port
- Supports PoE Power up to 30 watts for PoE port
- Auto detects IEEE 802.3at / IEEE 802.3af PoE equipment, protecting the devices from being damaged by incorrect installation
- Remote power feeding up to 100m
- IEEE 802.3at / IEEE 802.3af splitter devices compatibility

Hardware

- Metal Case
- LED indicators
  - Power LED
  - PoE In-use
  - Fiber LNK / ACT
  - TP LNK / ACT
- DIP-switch: LFP (Link Fault Pass-Through) mode selection

Standard Compliance

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3z 1000Base-X
- IEEE 802.3af Power over Ethernet standard
- IEEE 802.3at Power over Ethernet enhancements Standard
- FCC Part 15 Class A, CE

Fiber-Optical Link Capability Extends the Range of Network Deployment

The maximum distance between the PoE PSE and PD is 100 meters. To extend the network device deployment range, the GTP-80x is integrated with Fiber interface. The GTP-80x PoE+ Media Converter is used to convert optical Ethernet signal to electrical Ethernet signal that allows two segments to connect easily, efficiently and inexpensively. It can convert 10/100/1000Base-T signal to 1000Base-X one and provide the diverse options of fiber connecting types to meet different network applications.

The GTP-80x series and its fiber connecting type includes:

- GTP-802: SC Fiber Interface with Multi-mode, Distance up to 220m and 550m
- GTP-802S: SC Fiber Interface with Single-mode, Distance up to 10km
- GTP-805A: LC Fiber Interface, supports Multi / Single Mode SFP module, Distance up to 120km max. (Varying on SFP module)

With the long Fiber distance support, it still sustains the transmission performance as high as 1000Mbps. It works in high performance Store and Forward mechanism, and also can prevent packet loss with IEEE 802.3x Flow Control (Full-Duplex) and the LFP (Link Fault Pass through function) (LLCF/LLR) with the DIP Switch design. Furthermore, it can immediately alarm the administrators over the issue from the link media and provide efficient solution to monitoring the network power usage.

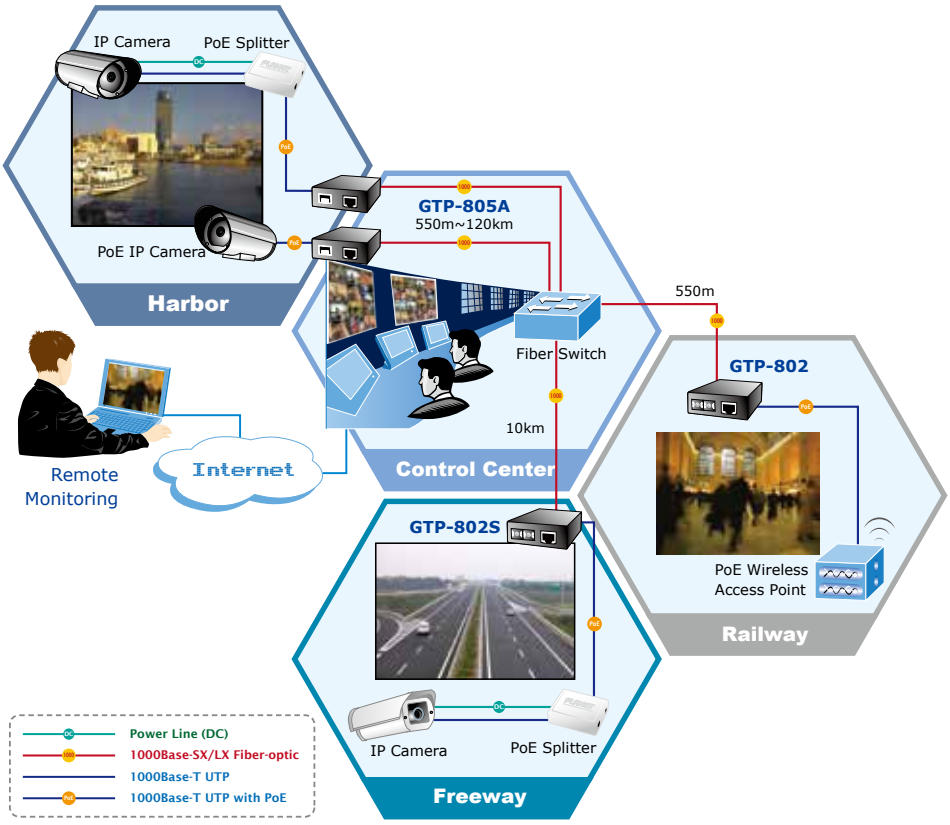
Quick and Easy High Power PoE Network Deployment

The GTP-80x series provides 52V DC power over Ethernet cables -- just insert DC voltage into Cat.5/5e/6 cable, allowing the cable between the PoE splitters (POE-151S / POE-152S / POE-162S) to transfer data and power simultaneously for up to 100 meters. Then it will spilt the digital data and the power into two selectable DC outputs (5V DC / 12V DC). Thus, it reduces cables and the dedicated electrical outlets on the wall, ceiling or any unreachable place. Most of all, it also eliminates the time for installation. The high Power over Ethernet solution frees the security IP camera and wireless AP deployment from restrictions of power outlet locations.

Product Application

Flexible and User-Friendly PoE Deployment

For the places difficult to find the power outlet, the GTP-80x series provides the easiest way to power your Ethernet devices such as PLANET IEEE 802.3at / IEEE 802.3af PoE splitter (POE-151S / 152S / 162S) and non PoE compliant Internet camera or wireless PoE access point. For instance, users can flexibly install the security IP camera, wireless access point and other IEEE 802.3at / IEEE 802.3af compliant network equipment around the corner in the public areas such as station or freeway for surveillance demands, or build a wireless roaming environment on the campus or at the airport.



Specifications

Model	GTP-802	GTP-802S	GTP-805A
Interface			
Copper	10/100/1000Base-T Ethernet TP interface Auto-Negotiation, Auto MDI/MDI-X with PoE injector function		
Fiber	Multi-mode: 50/125 µm or 62.5/125 µm optic fiber	Single-mode: 9/125 µm optic fiber	Varying on SFP Module
Fiber Port Type (connector)	SC	SC	SFP (LC)
Cable Distance	220m & 550m	10km	
Optical Frequency	850nm	1310nm	
Launch Power(dBm)	Max. -4 Min. -9.5	Max. -3 Min. -9.5	Varying on SFP Module
Receive Sensitivity	-13.5	-14.4	
Maximum Input power	-18	-20	
Power Over Ethernet			
PoE Output	IEEE 802.3af Power over Ethernet standard IEEE 802.3at Power over Ethernet enhancements standard		
Power Output	PoE 52V DC, Max. 30 Watts		
PoE Power Supply Type	Mid-Span		
Power Pin Assignment	4/5(+), 7/8(-)		
PoE Power Budget	30Watts		
Hardware Specification			
Switch Architecture	Store-and-Forward		
Flow Control	Back pressure for Half Duplex mode IEEE 802.3x Pause Frame for Full Duplex mode		
LED	System: PWR Fiber 1000Base-X: LNK / ACT TP 10/100/1000Base-T: LNK / ACT PoE: Power in-use		
Dimensions (W x D x H)	70 x 94 x 26 mm		
Weight	0.21kg		
Power Supply	52V DC, 0.58A External AC-to-DC adapter		
LFP mode	Enable: when either TP port or Fiber port is broken, automatically shut down the other port Disable: Link LED indicators still on if the other end's connection is broken		
Standards Conformance			
Regulation Compliance	FCC Part 15 Class A, CE		
Protocols and Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3z Gigabit Ethernet over Fiber-Optic IEEE 802.3x Flow Control IEEE 802.3af Power over Ethernet. IEEE 802.3at Power over Ethernet enhancements standard		
Cables	TP: Cat 5 / 5e / 6 UTP cable Fiber: Multi-mode: 50/125 µm or 62.5/125 µm optic fiber Single-mode: 9/125 µm optic fiber		
Environment			
Temperature	0~50 degrees C		
Humidity	5~90% (non-condensing)		

Ordering Information

GTP-802	1000Base-X to 10/100/1000Base-T 802.3at PoE Media Converter (SC,MM) -550m
GTP-802S	1000Base-X to 10/100/1000Base-T 802.3at PoE Media Converter (SC,SM) -10km
GTP-805A	1000Base-X to 10/100/1000Base-T 802.3at PoE Media Converter (mini-GBIC, SFP)

Related Products

POE-151S	IEEE 802.3af Power Over Ethernet Splitter with 5V/12V DC output (10/100Mbps)
POE-152S	IEEE 802.3af Power Over Ethernet Splitter with 5V/12V DC output (10/100/1000Mbps)
POE-162S	IEEE 802.3at Power Over Ethernet Splitter with 12V/24V DC output (10/100/1000Mbps)
ICA-HM126	Full HD H.264 Box IP Camera
ICA-HM132	2 Mega-pixel 20M IR Vari-focal Dome IP Camera
ICA-HM136	2 Mega-pixel 15M IR Vandalproof Dome IP Camera
VIP-254PT	802.3af PoE SIP IP Phone

PLANET Technology Corporation

11F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)
Tel: 886-2-2219-9518 Fax: 886-2-2219-9528
Email: sales@planet.com.tw www.planet.com.tw

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