

Product Specifications

1000BASE-X to 10/100/1000BASE-T PoE+ Media Converter

GTP-802 / GTP-802S / GTP-805A

Version 2.0

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Change History:

Revision	Date	Author	Change List
Version 2.0	2017/10/25	Bryant Wu	1. Changes converter chipset from RTL8213MI to RTL8213M 2. GTP-805A supports 100BASE-X Fiber Transceivers
Version 1.0	2011/5/13	Bryant Wu	Initial release

Author	Bryant Wu	Editor:	Bryant Wu
Reviewed by:	Kent Kang	Approved by:	Kent Kang

1. PRODUCT DESCRIPTION



The Best Data Link and Power Sourcing Solution

To overcome more and more PoE PD devices that need higher power input and long distance transmission, PLANET has released a new GTP-80x series of Power over Ethernet Media Converter products with the **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 30 watts of output power
- 1000BASE-T port supports 10/100/1000Mbps in full-duplex mode
- 1000Mbps fiber-optic support (GTP-802/GTP-802S)
- 100/1000Mbps fiber-optic support (GTP-805A)

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** cameras, 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 High Power over Ethernet converter series** is an ideal solution to deliver data and power to network devices directly via the RJ45 interface without the need of installing extra power outlets and electrical cabling.

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 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 different segments to connect easily, efficiently and inexpensively. It can convert 10/100/1000BASE-T signal to 1000BASE-X signal and provides different diverse fiber connecting types to meet different network applications.

Model List:

- GTP-802: SC Fiber Interface supports multi-mode with distance up to 220m and 550m
- GTP-802S: SC Fiber Interface supports single-mode with distance up to 10km
- GTP-805A: LC Fiber Interface supports multi/single mode SFP module with distance up to 120km (may vary on SFP module)

With the long fiber distance support, it still sustains the transmission performance as high as 1000Mbps. It works in the high performance Store and Forward mechanism and can prevent packet loss with IEEE 802.3x flow control (full-duplex) and the LFP (Link Fault Passthrough function) (LLCF/LLR) with the DIP Switch design. It can immediately alarm administrators over the issue from the link media and provide an efficient solution to monitor 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-161S/POE-162S/IPOE-162S) to transfer data and power simultaneously for up to 100 meters. Then it will split the digital data and the power into two kinds of selectable DC outputs (5V DC/12V DC) or (12V DC/24V 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.

2. PRODUCT FEATURES

■ Interface

- 1 RJ45 port
 - 1-Port **Data + Power** output
- 1 fiber optic port
 - 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 and IEEE 802.3at standard, mid-span PSE
- Provides DC 52V power over RJ45 Ethernet cable to devices with Ethernet port
- Supports PoE Power up to 30 watts for PoE port
- Auto-detects PoE IEEE 802.3at / IEEE 802.3af equipment, protecting the devices from being damaged by incorrect installation
- Remote power feeding up to 100m
- IEEE 802.3at / IEEE 802.3af splitter devices compatible

■ 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
- 9K maximum frame size supported

■ Standard Compliance

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

3. PRODUCT SPECIFICATIONS

3.1 MAIN COMPONENTS

Switch Controller	Realtek RTL8213M
PoE Controller	PD69101
Fiber Transceiver	May vary on Model

3.2 Functional Specifications

Product	GTP-802	GTP-802S	GTP-805A
Interfaces			
Version	2		
Copper Port	1-Port 10/100/1000BASE-T Ethernet TP interface Auto-negotiation, auto MDI/MDI-X with PoE injector function		
SFP Port	1000BASE-X SFP interfaces		100/1000BASE-X SFP interfaces
Fiber Mode	Multi-mode: 50/125 μm or 62.5/125 μm optic fiber	Single-mode: 9/125 μm optic fiber	May vary on SFP Module
Fiber Port Type (Connector)	SC	SC	SFP
Cable Distance	220m & 550m	10km	May vary on SFP Module
Optical Frequency	850nm	1310nm	
Launch Power (dBm)	Max.-4 Min.-9.5	Max. -3 Min.-9.5	
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	1/2 (+), 3/6 (-)		
PoE Power Budget	30 watts		
Hardware Specifications			
Switch Architecture	Store-and-Forward		
Flow Control	Back pressure for half duplex mode IEEE 802.3x pause frame for full duplex mode		
Maximum Frame Size	9K		
LED	System: PWR Fiber 100/1000BASE-X: LNK / ACT (GTP-805A) Fiber 1000BASE-X: LNK / ACT (GTP-802/GTP-802S)		

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	TP 10/100/1000BASE-T: LNK/ACT PoE: Power-in-use
Power Supply	52V DC, 0.58A external AC-to-DC adapter
LFP Mode	Enable: Shut down either TP port or fiber port that is broken Disable: Link LED indicators still on if connection of the other end is broken
Standards Conformance	
Protocols and Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u 100BASE-TX/100BASE-FX 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 μ m or 62.5/125 μ m optic fiber Single-mode: 9/125 μ m optic fiber

3.3 Physical Specifications

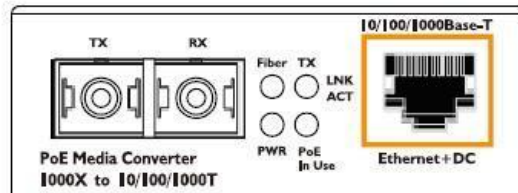
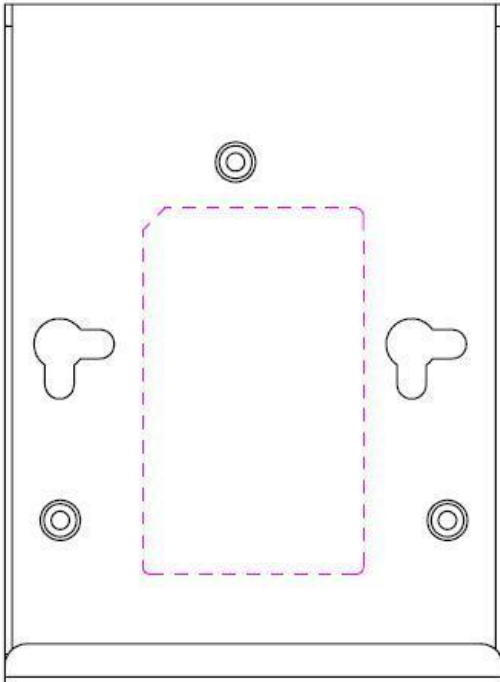
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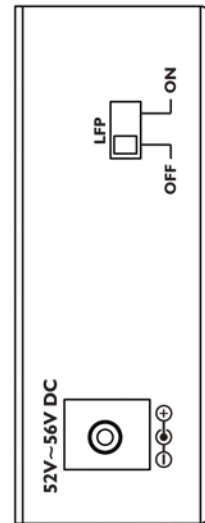
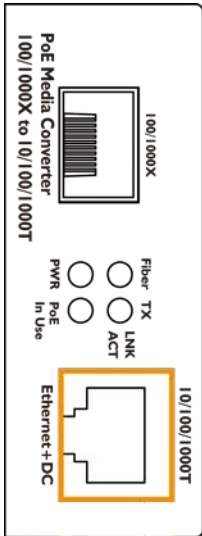
94 x 70 x 26 mm (W x D x H)

Weight:

212g

GTP-802 / GTP-802S



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GTP-805A:

LED Definition

 > **System**

LED	Color	Function	
PWR	Green	Light	Indicates the device is powered.

 > **10/100/1000BASE-TX RJ-45**

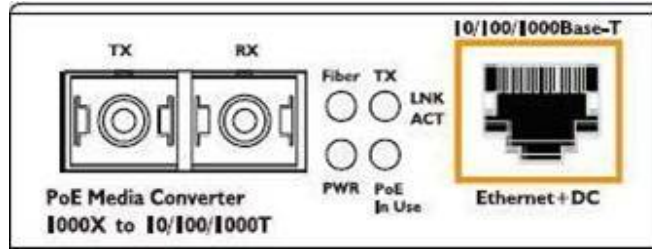
LED	Color	Function	
LNK/ACT	Green	Blink	Indicates that the PoE+ Media Converter is actively sending or receiving data over that port.
		Light	Indicates that the port is linked up.
		Off	Indicates that the port is linked down.
PoE in Use	Orange	Light	Indicates that the port is providing 52V DC to remote powered device.
		Off	Indicates that the port is not providing 52V DC to remote powered device.

 > **100/1000BASE-X Fiber Interface**

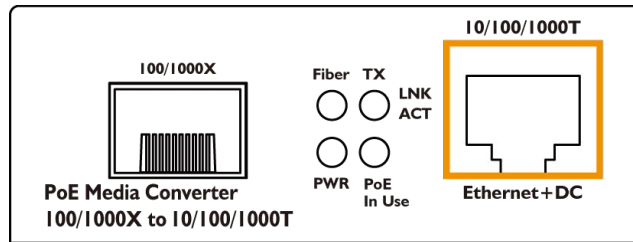
LED	Color	Function	
LNK/ACT	Green	Blink	Indicates that the PoE+ Media Converter is actively sending or receiving data over that port.
		Light	Indicates that the port is linked up.
		Off	Indicates that the port is linked down.

■ **Left Panel**

GTP-802 / GTP-802S



GTP-805A



3.4 Environmental Specifications

Operating

Temperature: 0~50°C

Relative Humidity: 5~90% (non-condensing)

Storage

Temperature: -40~70°C

Relative Humidity: 5~90% (non-condensing)

3.5 Electrical Specification

GTP-802 / GTP-802S / GTP-805A		
Power requirement:	52 ~ 56V DC	
Power Consumption:	Standby	3 watts / 10.2 BTU
	Full Loading	26.4 watts / 90 BTU*

3.6 Regulatory Compliance

FCC Class A, CE

3.7 Reliability

MTBF > 50,000 hrs @ 25 degrees C

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3.8 BASIC PACKAGING

- 802.3at PoE Gigabit Ethernet Media Converter x 1
- User's Manual x 1
- External DC 52V Power Adapter x 1
- Power Cord x 1

3.9 PACKING DIMENSIONS

Box Dimensions (W x D x H):	200x 172 x 77mm
Gross Weight:	TBD
Carton Dimensions (W x D x H):	640 x 375 x 353mm
Total Weight:	TBD
Quantity:	24pcs per carton