

10/100/1000Base-T to 1000Base-SX/LX Gigabit Media Converter



For the flexibility with all kind 10/100/1000Mbps Ethernet Media on RJ-45 port and high stable Gigabit fiber performance. The **GT-802**, **GT-802S**, **GT-805A** and **GT-806A/B** series of Media Converters supports conversion between **10/100/1000Base-T** and **1000Base-LX/SX** network, there are SC/SFP/WDM connectors with single-mode or multi-mode media as required. The Ethernet signal allows three types of segments to connect easily, efficiently and inexpensively.

Distance Extension with High Performance and Steady Network Communication

The PLANET Gigabit Media Converter - GT-80x series extends communication distance with highly Gigabit performance via fiber optical cable. The GT-80x series provides media conversion between 10/100/1000Base-T and 1000Base-SX/LX interfaces such as multi-mode LC/SC connectors (220m / 550m), single-mode LC/SC connectors (10/20/30/40/50/70/120km) and single fiber connectors (WDM, 15/60km) for various fiber optic applications.

Enhanced Smart Management Features

The GT-80x series provides Auto MDI/MDI-X on its TP port and the DIP switch to configure the Link Fault Pass Through function (LFP). The LFP function includes the Link Fault Pass Through function (LLCF/LLR). LLCF/LLR can immediately alarm administrators the problem of the link media and provide efficient solution to monitor the net, the DIP Switch provides disable or enable the LFP function.

LLCF (Link Loss Carry Forward) means when a device connected to the converter and the TP line loss the link, the converter's fiber will disconnect the link of transmit. LLR (Link Loss Return) means when a device connected to the converter and the fiber line loss the link, the converter's fiber will disconnect the link of transmit. Both can immediately alarm administrators the problem of the link media and provide efficient solution to monitor the net.

Moreover, Even the web UI is not available on GT-80x, the network manager still can remotely control and monitor GT-80X by OAM TS-1000 terminal function such as remote failure indication, loop back test, port status, performance monitoring and troubleshooting. The PLANET GT-90x and IGT-90xT series products provide TS-1000/802.3ah OAM protocol (operations, administration, and maintenance) supported helps remote GT-80x device can be managed and monitored.

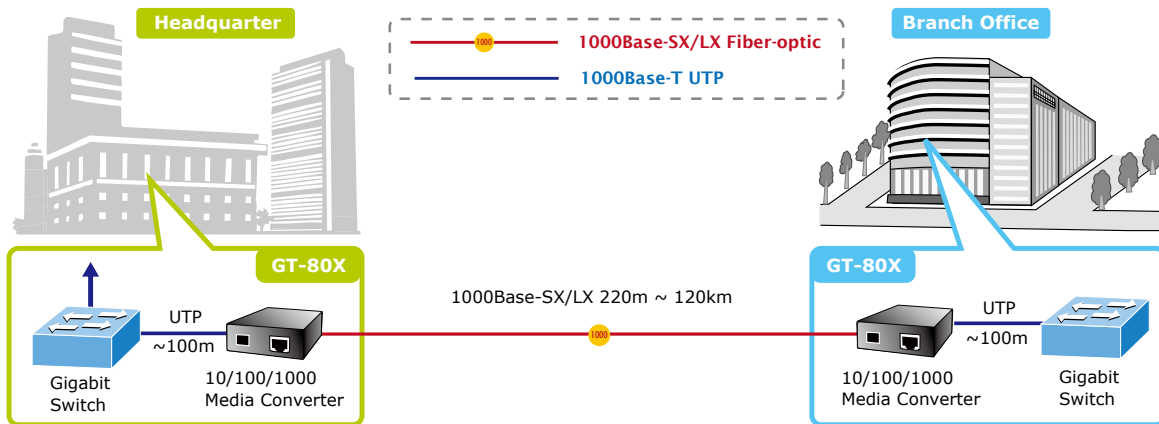
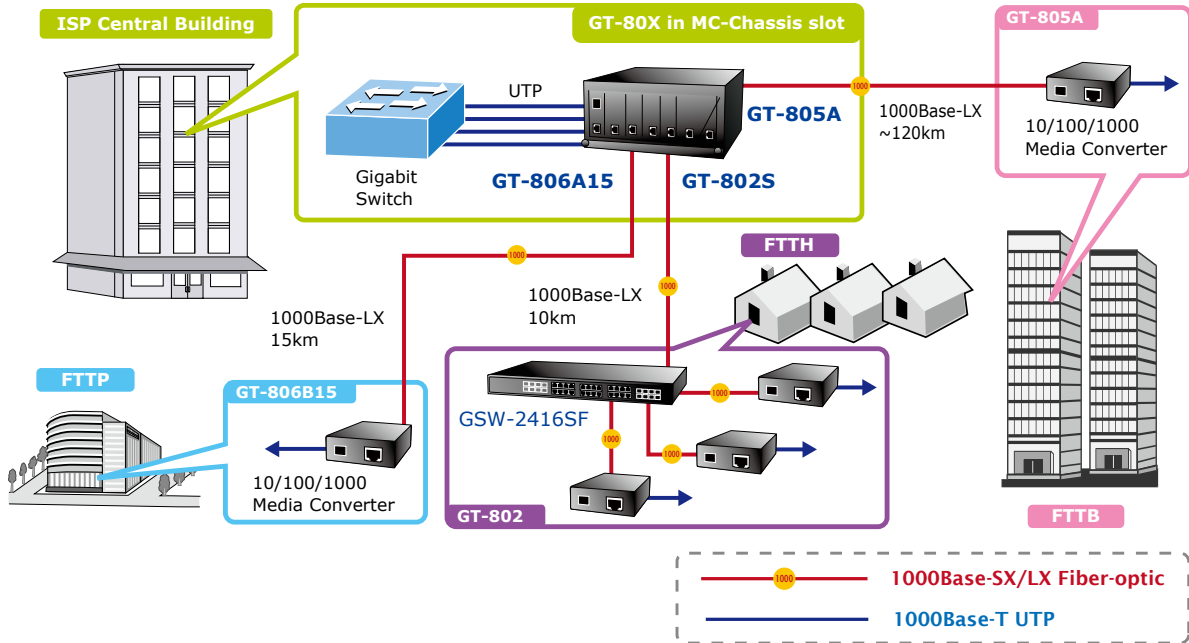
Easy Installation

The GT-80x series allows two type segments to connect easily, the GT-80x series can be used as a standalone unit when powered by it's DC adapter or used as a slide-in module to the PLANET 19-inch 7/15-Slots media converter chassis (MC-700/MC-1500/ MC-1500R / MC-1500R48). These media chassis can assist in producing the power for GT-80x to maintain the fiber-optic network at one location. As the Gigabit Media Converter fully complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T and IEEE 802.3z 1000Base-LX/SX, the Gigabit media conversion installation is quite quick and easy by simple plugging and playing feature. The GT-80x also supports flow control and back pressure in half-duplex to eliminate packets loss.

APPLICATIONS

Fiber-optic Networking for ISP, enterprise, and home

With high performance of data transmission and easy installation, the GT-80x can build the ISP network solution of FTTH (Fiber to the Home) or FTTC (Fiber to the Curb) for ISPs and FTTB (Fiber to the Building), for small office network environment of enterprises.



KEY FEATURES

- Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-SX/LX.
- TP port supports 10/100/1000Base-T auto-negotiation and auto-MDI/MDI-X.
- 1000Base-SX: 50/125µm or 62.5/125µm multi-mode fiber cable, up to 220/550m (GT-802).
- 1000Base-LX: 9/125µm single-mode cable provides long distance for 10km (GT-802S).
- 1000Base-LX WDM interface for up to 15km (single-mode fiber 9µm/125µm) on GT-806A15/B15.
- 1000Base-LX WDM interface for up to 60km (single-mode fiber 9µm/125µm) on GT-806A60/B60.
- 1000Base-T: 2-pair Cat. 5/5e/6 UTP cable, up to 100 meters.
- Layer 2 key Feature
 - IEEE 802.3x Full-Duplex Flow-Control and Back-Pressure in Half-Duplex eliminate the loss of packets
 - Support auto MDI/MDI-X function
 - Store-and-Forward mechanism
- Non-blocking full wire-speed forwarding rate
- Media conversion between 10/100/1000Base-T and 1000Base-SX/LX.
- Fiber media allows:
 - Multi-mode fiber using SC/LC/WDM connector;
 - Single-mode fiber using SC/LC/WDM connector
- Compact size for working with PLANET MC family Media Chassis (MC-700/MC-1500/ MC-1500R / MC-1500R48)
- Wall-mountable design
- LED indicators for easy network diagnose
- Provides DIP switch for LFP function (Disable / Enable) setting
- OAM TS-1000 supported
- 9K Jumbo Frame Supported
- Choice of fiber-connector from SC, LC and WDM, multi-mode / single-mode fiber for 1000Base SFP interface
- Compact in size, easy installation

SPECIFICATION

Model	GT-802	GT-802S	GT-805A	GT-806A15	GT-806B15	GT-806A60	GT-806B60
Hardware Specification							
Hardware Version	3						
Standards	IEEE 802.3, 10Base-T IEEE 802.3u, 100Base-TX IEEE 802.3ab, 1000Base-T IEEE 802.3z, 1000Base-SX/LX						
Ports	1 x 10/100/1000Base-T port, 1 x 1000Base-SX/LX port						
Copper Interface	RJ-45 port (Auto-MDI/MDI-X) Twisted Pair						
Optic Interface	SC		SFP	WDM			
Fiber Maximum Distance	220 / 550m	10km	-	15km	15km	60km	60km
Optic Wavelength	850nm	1310nm	-	TX:1310nm RX:1550nm	TX:1550nm RX:1310nm	TX:1310nm RX:1550nm	TX:1550nm RX:1310nm
Max. Optical Launch Power	-4dBm	-3dBm	-	-3dBm	-3dBm	+5dBm	+4dBm
Min Optical Launch Power	-9.5dBm	-9.5dBm	-	-9dBm	-9dBm	0dBm	-1dBm
Max Input Power	-	-3	-	-3	-3	-2	-2
Min Input Power	-18	-20	-	-21	-21	-25	-25
Optical Link Budget	3dB (62.5/125µm) 4dB (50/125µm)	4.9dB	-	12dB	12dB	25dB	24dB
Speed	Twisted-pair	10/20Mbps for Half/Full-Duplex 100/200Mbps for Half/Full Duplex 2000Mbps for Full-Duplex					
	Fiber-optic	2000Mbps for Full-Duplex					

Cable	Twisted-pair	10Base-T: 2-pair UTP Cat. 3,4,5, up to 100 m 100Base-TX: 2-pair UTP Cat. 5, up to 100 m 1000Base-T: 4-pair STP Cat 5 up to 100m
	Fiber-optic Cable	<ul style="list-style-type: none"> • 50/125µm or 62.5/125µm multi-mode fiber cable, up to 220/550m. • 9/125µm single-mode cable, provides long distance for 10/15/20/30/40/50/60/70/120km (vary on fiber transceiver or SFP module)
LED Indicator		<ul style="list-style-type: none"> • PWR • TP LINK/ACT, 1000 • Fiber LINK/ACT
DIP switch		LFP function (Disable / Enable) setting
OAM		TS-1000 and IEEE 802.3ah Terminal mode supported
Jumbo Packet Size		9K
Power Consumption		4.6 Watts / 15 BTU (maximum)
Power Input		DC 5V / 2A
Dimensions (W x D x H)		26 x 70 x 97 mm
Weight		0.2kg
Operator Environment		Operating temperature: 0 to 50 Degree C; Humidity: 5~95% non-condensing
Storage Environment		storage temperature: -10 to 70 Degree C; Humidity: 5~95% non-condensing
Emissions		FCC Class A, CE Class A

ORDERING INFORMATION

GT-802	10/100/1000Base-T to 1000Base-SX Media Converter (SC,MM)-220/550m
GT-802S	10/100/1000Base-T to 1000Base-LX Media Converter (SC,SM)-10km
GT-805A	10/100/1000Base-T to 1000Base-SX/LX Media Converter (mini-GBIC, SFP)-distance depend on SFP module
GT-806A15	10/100/1000Base-T to 1000Base-LX (WDM) Media Converter TX:1310nm~15km
GT-806B15	10/100/1000Base-T to 1000Base-LX (WDM) Media Converter TX:1550nm~15km
GT-806A60	10/100/1000Base-T to 1000Base-LX (WDM) Media Converter TX:1310nm~60km
GT-806B60	10/100/1000Base-T to 1000Base-LX (WDM) Media Converter TX:1550nm~60km

RELATED SFP MODULES FOR GT-805A

MGB-SX	SFP-Port 1000Base-SX Transceiver, LC, MM-550m
MGB-LX	SFP-Port 1000Base-LX Transceiver, LC, SM-10km
MGB-L30	SFP-Port 1000Base-LX Transceiver, LC, SM-30km
MGB-L50	SFP-Port 1000Base-LX Transceiver, LC, SM-50km
MGB-L70	SFP-Port 1000Base-LX Transceiver, LC, SM-70km
MGB-L120	SFP-Port 1000Base-LX Transceiver, LC, SM-120km
MGB-LA10	1000Base-LX Transceiver, LC, WDM (TX:1310nm) SM-10km
MGB-LB10	1000Base-LX Transceiver, LC, WDM (TX:1550nm) SM-10km
MGB-LA20	1000Base-LX Transceiver, LC, WDM (TX:1310nm) SM-20km
MGB-LB20	1000Base-LX Transceiver, LC, WDM (TX:1550nm) SM-20km
MGB-LA40	1000Base-LX Transceiver, LC, WDM (TX:1310nm) SM-40km
MGB-LB40	1000Base-LX Transceiver, LC, WDM (TX:1550nm) SM-40km