

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



To provide an easy use yet powerful solution for FTTX applications, PLANET releases a new 10/100/1000Base-T to 1000Base-SX/LX Smart Media Converter, GST-80x series, featuring plug & play and smart media conversion functions.

Distance Extension with High Performance and Steady Network Communication

The PLANET Smart Gigabit Media Converter- GST-80x series extends communication distance with highly Gigabit performance via fiber optical cable. The GST-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 GST-80x series provides Auto MDI/MDI-X on its TP port and the DIP switch to configure the available smart functions including the auto-negotiation / force for fiber interface and Link Pass Through function (LLCF/LLR). The Link Loss Carry Forward (LLCF) function works with Link Loss Return (LLR) to diagnose network connections. Also, the LLR function can immediately alarm network administrator the media link issue and provide efficient solution to monitor the entire network.

Easy Installation

The GST-80x series allows two type segments to connect easily. The Smart Media Converter 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 Web Smart / Managed 16-Slots media converter chassis (MC-1600MR/MC-1600MR48 & MC-1610MR / MC-1610MR48). When working with the Web Smart / Managed media converter chassis, the GST-80x is able to be managed and its status be monitored through the local RS-232 console and remote web interface.

KEY FEATURES

STANDARDS

- Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-SX/LX Ethernet Standard

INTERFACE

- One 10/100/1000Base-T port with RJ-45 connector
- One 1000Base-SX/LX port with LC/SC/WDM connector supporting multi-mode or single-mode fiber optic cable
- Auto-negotiation and Auto-MDI / MDI-X for 10/100/1000Base-T port

LAYER 2 FEATURES

- Back-pressure & IEEE 802.3x compliant flow control and full wire-speed forwarding rate
- 9K Jumbo Frame size supported
- Link Loss Return (LLR) switch on each fiber optic to aid in troubleshooting remote network connections
- Link Loss Carry Forward (LLCF) work with LLR in diagnosing network connections

SMART MANAGEMENT

- Provides DIP switch for fiber (Auto-negotiation / Manual) and LFP function (Disable / Enable) setting
- Manageable through Web Smart / Managed Media Converter Chassis System (MC-1600MR/MC-1610MR series)
- Bandwidth control / TS-1000 OAM / IEEE 802.3ah OAM / Loop Back Test function provided with MC-1610MR / MC-1610MR48 Managed Media Converter Chassis System

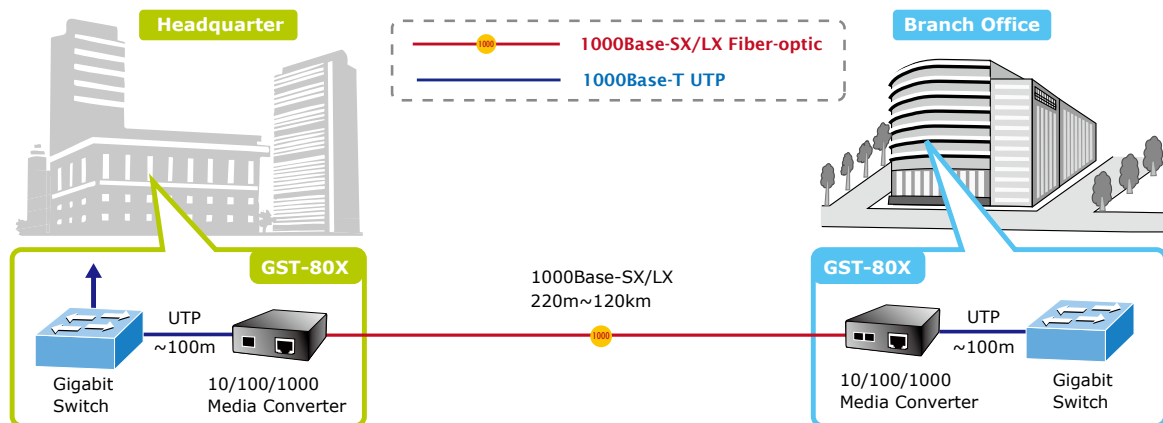
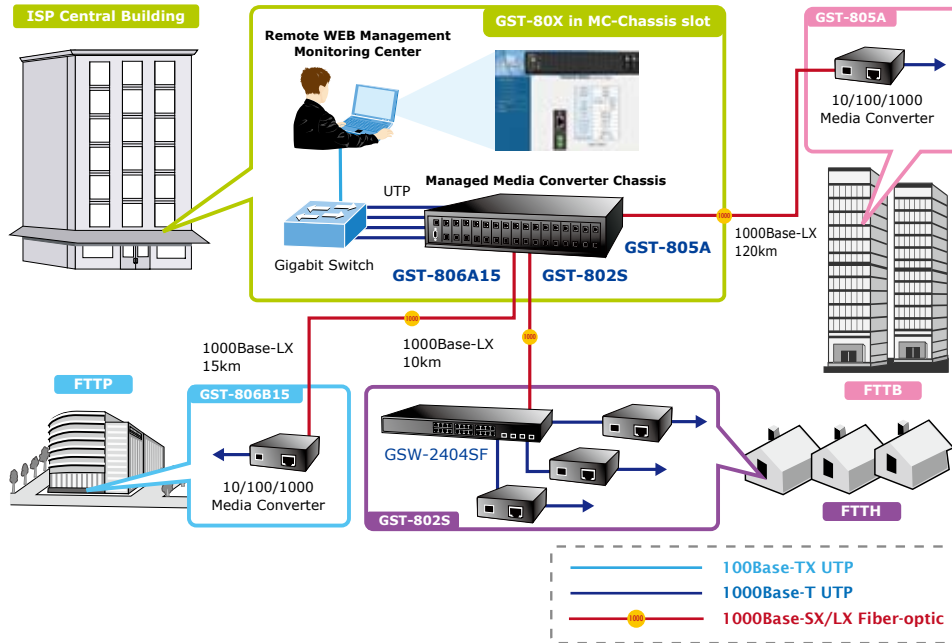
HARDWARE

- Used as a stand-alone device or work with Web Smart / Managed Media Converter Chassis for up to 16 converter with redundant power supply for optional expansion use
- LED indicators for converter status
- Choice of fiber-connector from SC, LC, WDM, multi-mode / single-mode fiber / 1000Base-SX / LX mini GBIC module
- EMI standards complies with FCC, CE class A

APPLICATIONS

Fiber-Optic Networking for ISP, Enterprise, and Home

The PLANET GST-80x provides advanced Media conversion technology- 10/100/1000Base-T and 1000Base-SX/LX interfaces to fulfill different kinds of demand as the current network grows and expanding. The GST-80x provides diverse fiber connect type options for different network applications. It is very flexible for the GST-80x working as a standalone device or being installed in the central Web Smart / Management media converter chassis for centralized management. When working with the Web Smart / Management media converter chassis, the GST-80x is hot swappable to avoid network downtime. The GST-80x is the ideal solution for building a network solution of FTTH (Fiber to the Home) or FTTC (Fiber to the Curb), and FTTB (Fiber to the Building) for ISPs, campuses and enterprise.



SPECIFICATION

Model	GST-802	GST-802S	GST-805A	GST-806A15	GST-806B15	GST-806A60	GST-806B60
Hardware Specification							
Standards	IEEE 802.3, 10Base-T IEEE 802.3u, 100Base-TX IEEE 802.3ab, 1000Base-T IEEE 802.3z, 1000Base-SX/LX IEEE 802.3ah OAM						
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			
Optic Wavelength	850nm	1310nm	-	TX:1310nm RX:1550nm	TX:1550nm RX:1310nm	TX:1310nm RX:1550nm	TX:1550nm RX:1310nm
Launch Power(dBm)	Max. -4 dBm Min. -9.5 dBm	-3 dBm -9.5dBm	-	-3 dBm -9 dBm	+5 dBm 0 dBm	-3 dBm -9 dBm	+4 dBm -1 dBm
Receive Sensitivity	-13.5 dBm	-14.4 dBm	-	-21 dBm	-25 dBm	-21 dBm	-25 dBm
Maximum Input power	-18 dBm	-20 dBm	-	-3 dBm	-3 dBm	-2 dBm	-2 dBm
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: 50/125µm or 62.5/125µm multi-mode fiber cable, up to 220/550m. 9/125µm single-mode cable, provides long distance for 10/20/30/40/50/70/120km (vary on fiber transceiver or SFP module)						
LED Indicator	PWR (Green) TP: 1000, LINK/ACT Fiber: LINK/ACT						
DIP Switch	Fiber (Auto-negotiation / Manual), LFP (Disable / Enable)						
Power Consumption	3.1 Watts / 10BTU (maximum)						
OAM	TS-1000, IEEE 802.3ah terminal						
Jumbo Frame size	9K						
Power Input	DC 5V / 2A						
Dimension (W x D x H)	81 x 94 x 26 mm						
Operating Environment	Temperature: 0~50 Degree C; Humidity: 5~90% non-condensing						
Storage Environment	Temperature: -40~70 Degree C; Humidity: 5~90% non-condensing						
Emissions	FCC Class A, CE Class A						

ORDERING INFORMATION

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

RELATED SFP MODULES FOR GST-805A

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

RELATED PRODUCTS

<i>MC-1600MR</i>	16-Slot Web Smart Media Converter Chassis(AC power)
<i>MC-1600MR48</i>	16-Slot Web Smart Media Converter Chassis(DC power)
<i>MC-RPS130</i>	130W Redundant Power Supply for MC-1600MR , 100-240V AC
<i>MC-RPS48</i>	Redundant Power Supply for MC-1600MR48, DC -48V
<i>MC-1610MR</i>	16-Slot Managed Media Converter Chassis(AC power)
<i>MC-1610MR48</i>	16-Slot Managed Media Converter Chassis(DC power)
<i>MC-RPS90</i>	90W Redundant Power Supply for MC-1610MR, 100-240V AC
<i>MC-RPS48</i>	Redundant Power Supply for MC-1610MR48, DC -48V