

# Managed Gigabit Ethernet Media Converter



## WEB/SNMP/OAM Remotely Managed Gigabit Converter

The PLANET GT-90x series is the 10/100/1000Base-T to 1000Base-LX / SX Managed Media Converter developed to fill the advanced demand from further Network applications and equipped with the feature of plug and play. The GT-90x series provide the flexibility with all kinds of 10/100/1000Mbps Ethernet Media on RJ-45 port and offer highly stable Gigabit fiber performance. It supports conversion between 10/100/1000Base-T and 1000Base-LX / SX network, which includes 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.

## Friendly/Centralize/Simple Web Management Interface

For efficient management, the GT-90x series Managed Gigabit Ethernet Media Converter is equipped with remote Web / SNMP interface. With its built-in Web-based management, the PLANET GT-90x series acts as an easy-to-use, platform-independent management and configuration facility. The GT-90x series also supports standard Simple Network Management Protocol (SNMP) and can be managed via any standard-based management software. Moreover, the TS-1000/802.3ah OAM protocol (operations, administration, and maintenance) supported helps remote device be managed and monitored by GT-90x.

## Enhanced Management Features

The GT-90x series can be programmed for advanced management functions such as IP address configuration, DHCP Client function, port configuration, converter configuration, 802.1Q Tag VLAN, Q-in-Q VLAN, Ingress/Egress bandwidth control, QoS and Layer protocol filter, broadcast storm and bandwidth control, to enhance bandwidth utilization.

## Easy Installation

As the GT-90x series Managed Gigabit Ethernet 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. This GT-90x series can be used as a stand-alone unit or as a slide-in module to the PLANET Media Converter Chassis (MC-700, MC-1000 and MC-1500). The media converter chassis can provide DC power to GT-90x series to maintain the fiber-optic network at the central location.

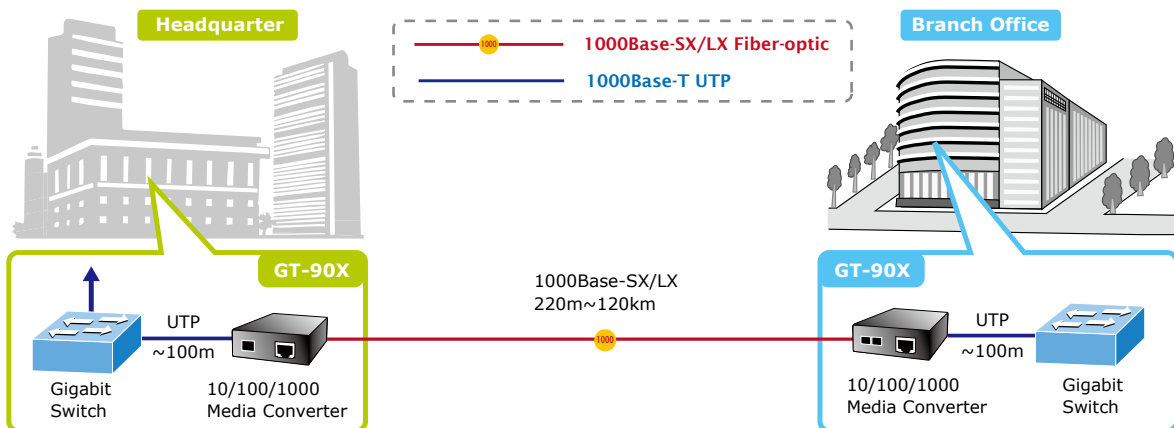
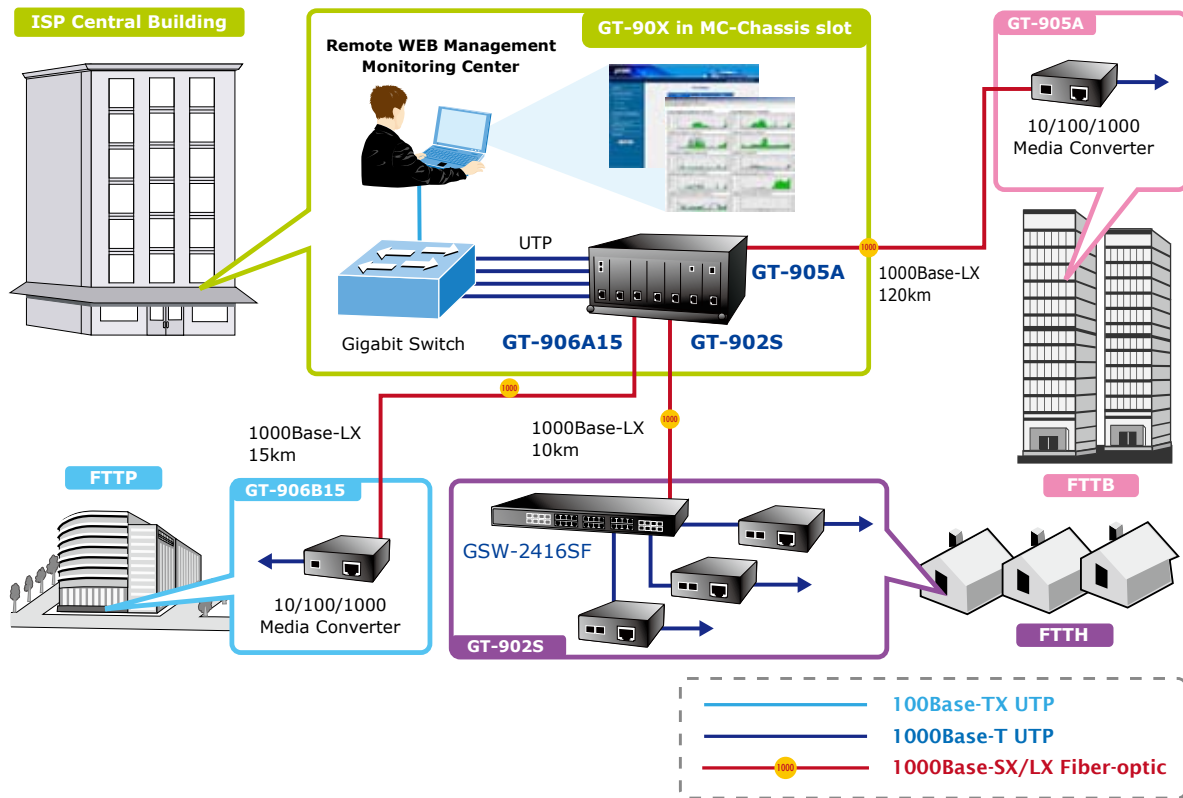
## KEY FEATURES

- Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-SX/LX
- One-channel media conversion between 10/100/1000Base-T and 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 on GT-902
- 1000Base-LX: 9/125µm single-mode cable provides long distance for 10km on GT-902S
- 1000Base-LX WDM interface for up to 15km (single-mode fiber 9µm/125µm) on GT-906A15/B15
- 1000Base-LX WDM interface for up to 60km (single-mode fiber 9µm/125µm) on GT-906A60/B60
- 1000Base-T: 2-pair Cat. 5/5e/6 UTP cable, up to 100 meters
- Compact size for working with PLANET MC family Media Chassis (MC-700/1000R/1500)
- Wall-mountable hardware design
- Built-in IP-based Web interface for remote management
- Layer 2 Management Feature
  - IEEE 802.3x PAUSE Frame Flow Control for Full-Duplex mode
  - Store-and-Forward mechanism
  - Built-in Web interface for remote management and setup
  - Manual IP address setting / DHCP client for IP address assignment
  - SNMP v1 / v2c monitor / private Enterprise MIB
  - Event trap and SNMP trap support
  - Speed duplex mode configuration / Flow Control setting / bandwidth Control on TP / Fiber port
  - Supports Port Status / Ethernet Statistics on both TP and Fiber interface
  - Supports Maximum frame size to 16K bytes
  - Loop detection / Broadcast / Multicast / Unicast storm control
  - Management VLAN / 16 IEEE 802.1Q VLAN groups / Q-in-Q VLAN
  - 802.1p Tag Priority / IP address priority / IP DSCP option in Quality of Service Mode and Strict Priority / Weighted Round Robin (WRR) QoS policies
  - TS-1000 OAM / IEEE 802.3ah OAM / Loop Back Test
  - 16 TCP / UDP Filter groups
  - Password setting, IP setting and devices description setting through Planet Smart discovery utility
  - Firmware upgrade via remote Web interface
- External DC 5V 2A power supply
- LED indicators for easy network diagnosing
- Reset Button at the front panel for the factory default reset
- Choice of fiber-connector from SC, LC, WDM, multi-mode / single-mode fiber / 1000Base-SX / LX mini GBIC module

**APPLICATIONS**

*Fiber-Optic Networking for ISP, Enterprise, and Home*

With high performance of data transmission and easy installation, the GT-90x series Managed Gigabit Ethernet Media Converter can build an 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 from enterprises. The Web Management interface provided at the GT-90x series helps network administrators to easily monitor and setup the converter, the transmission speed and duplex through web browsers.



**SPECIFICATION**

Model	GT-902	GT-902S	GT-905A	GT-906A15	GT-906B15	GT-906A60	GT-906B60	
<b>Hardware Specification</b>								
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				
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	-3 dBm	--	-3 dBm	+5 dBm	-3 dBm	+4 dBm
	Min.	-9.5 dBm	-9.5dBm	--	-9 dBm	0 dBm	-9 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 10/15/20/30/40/50/60/70/120km (very on fiber transceiver or SFP module)						
LED indicator	PWR, TP LINK/ACT, 1000 Fiber LINK/ACT							
Power consumption	3.8 Watts/ 13 BTU (maximum)							
Power Input	DC 5V / 2A							
Dimension (W x D x H)	93 x 70 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**

GT-902	10/100/1000Base-T to 1000Base-SX Managed Media Converter (SC,MM)-220/550m
GT-902S	10/100/1000Base-T to 1000Base-LX Managed Media Converter (SC,SM)-10km
GT-905A	10/100/1000Base-T to mini-GBIC Managed Media Converter (LC,MM/SM)-distance depend on SFP module
GT-906A15	10/100/1000Base-T to 1000Base-LX Managed Media Converter (WDM,SM, TX:1310 RX:1550)-15km
GT-906B15	10/100/1000Base-T to 1000Base-LX Managed Media Converter (WDM,SM, TX:1550 RX:1310)-15km
GT-906A60	10/100/1000Base-T to 1000Base-LX Managed Media Converter (WDM,SM, TX:1310 RX:1550)-60km
GT-906B60	10/100/1000Base-T to 1000Base-LX Managed Media Converter (WDM,SM, TX:1550 RX:1310)-60km

**AVAILABLE MINI-GBIC MODULES FOR GT-905A**

<b>MGB-GT</b>	SFP-Port 1000Base-T mini-GBIC module
<b>MGB-SX</b>	SFP-Port 1000Base-SX mini-GBIC module
<b>MGB-LX</b>	SFP-Port 1000Base-LX mini-GBIC module
<b>MGB-L30</b>	SFP-Port 1000Base-LX mini-GBIC module -30KM
<b>MGB-L50</b>	SFP-Port 1000Base-LX mini-GBIC module -50KM
<b>MGB-L70</b>	SFP-Port 1000Base-LX mini-GBIC module -70KM
<b>MGB-L120</b>	SFP-Port 1000Base-LX mini-GBIC module -120KM
<b>MGB-LA10</b>	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1310nm), SM,10km
<b>MGB-LB10</b>	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1550nm), SM,10km
<b>MGB-LA20</b>	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1310nm), SM,20km
<b>MGB-LB20</b>	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1550nm), SM,20km
<b>MGB-LA40</b>	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1310nm), SM,40km
<b>MGB-LB40</b>	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1550nm), SM,40km