# 10/100/1000BASE-T to 100/1000BASE-X Media Converter

GT-805A

User's Manual

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#### 1. Product Features

#### GT-805A Gigabit Ethernet Media Converter:

- ◆ Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX/FX, IEEE 802.3ab 1000BASE-T, IEEE 802.3z 1000BASE-SX/LX standard
- Data transfer rate: TP 10/100/1000Mbps; SFP 100/1000Mbps
- ◆ DIP switch for **LFP** function (Disable/Enable) setting
- ◆ OAM (TS-1000 and IEEE 802.3ah) supported
- ◆ 9K jumbo frame supported
- ◆ Compliant with PLANET's 10"/19" media converter chassis

### 2. Checklist

Your GT-805A carton should contain the following items:

- ◆ The Gigabit Ethernet Media Converter
- ◆ AC-DC Power Adapter (Output: 5V DC, 2A max.)
- ◆ This User's Manual

If any item is missing or damaged, please consult the dealer from whom you purchased your Gigabit Ethernet Media Converter.



The GT-805A comes with one vacant SFP module slot. The mini GBIC SFP module is not bundled with in the package.

#### 3. Product Outlook

#### Right View (GT-805A)

There are one RJ45 twisted-pair jack (auto-MDI/MDI-X), one 100/1000X SFP fiber-optic slot and four LED indicators. Also one DIP switch for Link-Fault Passthrough (LFP) feature and "ON" to turn on the LLCF and LLR detection. And "OFF" to turn off the feature. Please refer to the following sections for more.

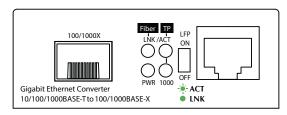


Figure 1: GT-805A Right View

#### Left View (GT-805A)

The rear panel of the Gigabit Ethernet Media Converter indicates one DC jack, which accepts input power with 5V DC 2A.

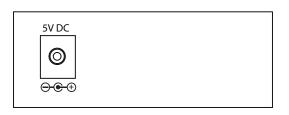
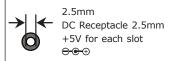


Figure 2: GT-805A Left View

#### **Power Information**

The power jack of Gigabit Ethernet Media Converter is with 2.5mm in the central post and required +5VDC power input. It will conform to the bundled AC-DC adapter and Planet's Media Chassis. Should you have the issue to make the power connection, please contact your local sales representative.

Please keep the AC-DC adapter as spare parts when your Gigabit Ethernet Media Converter is installed to a Media Chassis.



DC receptacle is 2.5mm wide that conforms to the Gigabit Ethernet Media Converter's 2.5mm DC jack's central post. Do not install any improper unit.

## 4. Link Fault Pass-Through (LFP)

The LFP function includes the Link-Fault-Passthrough function (LLCF/LLR) and the DIP Switch design. LLCF/LLR can immediately alarm administrators the issue of the link media and provide efficient solution to monitor the network. The DIP Switch will disable or enable the LFP function.

LLCF (Link Loss Carry Forward) means when a device is connected to the converter and the TP line loses the link, the converter's fiber will disconnect the link of transmit. LLR (Link Loss Return) means when a device is connected to the converter and the fiber line loses the link, the converter's fiber will disconnect the link of transmit.



LFP function is ON by default setting. If you are familiar with the network installation and for diagnostic purpose (i.e. check which end is broken), you can turn it off and reset the converter to make it take effect. Otherwise, please remain it in the default position.

### 5. Installing The Converter

To install GT-805A stand-alone, on a desktop or shelf, simply complete the following steps:

- **Step 1:** Turn off the power of the device/station in a network to which the GT-805A will be attached.
- **Step 2:** Attach fiber cable from the GT-805A to the fiber network. **TX** and **RX** must be paired at both ends.
- Step 3: Attach a Cat. 5/5e/6 UTP cable from the 10/100/1000BASE-T network to the RJ45 port on the GT-805A.
- **Step 4:** Connect the 5V DC power adapter to the GT-805A and verify that the Power LED lights up.
- Step 5: Turn on the power of the device/station; the TX Link and FX Link LEDs should light up when all cables are attached.

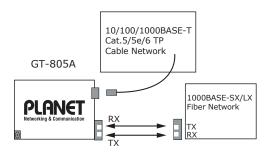


Figure 3: GT-805A Installation



- It is recommended to use PLANET MFB/MGB series 100/1000BASE-FX/SX/LX SFP on the GT-805A. If you insert an SFP transceiver that is not supported, the GT-805A will not recognize it.
- Please check the link-budget of your SFP transceivers and its physical wiring distance. In some installation, an in-line optical attenuator may be required to protect your transceivers.

## 6 Duplex Mode Support

The GT-805A TP port supports triple speed --10/100/1000BASE-T, auto-negotiation. It will auto detect the link speed and the duplex mode by default with its link partner. The fiber port (100/1000BASE-FX/SX/LX) allows 100/1000Mbps full duplex by auto-negotiation. Please also check the setting of the link partner as well.

## 7.LED indication

### GT-805A:

LED	Color	Description
PWR	Green	Lit when +5V DC power is detected.
Fiber	Green	Lit: To indicate the link through fiber port is successfully established.
LNK/ACT		Blinks: To indicate the fiber port is actively sending or receiving data.
TP	Green	Lit: To indicate the link through TP port is successfully established.
LNK/ACT		Blinks: To indicate the port is actively sending or receiving data.
TP 1000	Green	Lit when the port runs at 1000Mbps.
15 1000		Off when the port runs at 10/100Mbps.

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### 8 Cable Connection Parameter

### The wiring details are shown below:

Duplex	Connection	Limitation (max.)	
Twisted Pair			
Half/Eull	Node to Node	100 meters	
Half/Full	Node to Switch/Hub		

### Fiber Optic Cables:

Standard	100BASE-FX	1000BASE-SX	1000BASE-LX
(Wavelength)	(1310nm)	(850nm)	(1310nm)
Fiber Type & Cable Specifications	Multi-mode	50/125μm or 62.5/125μm	
Specifications	Single-mode	9/125µm	

# 9. Product Specifications

Model	GT-805A
Fiber Connector	SFP, LC type
Fiber Mode	May vary on module
Fiber Maximum Distance	May vary on module
Copper Connector	10/100/1000Mbps RJ45
Copper Modes	Full duplex, auto-negotiation
Packet Forwarding Rate (64bytes)	14880pps @10Mbps/148810pps @100Mbps/1488000pps @1000Mbps
DIP switch	LFP Disable/Enable
Protocols and Standards:	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3ab 1000BASE-T IEEE 802.3z 1000BASE-SX/LX
OAM	TS-1000, IEEE 802.3ah terminal
Jumbo Packet Size	9K
Dimensions	26 x 70 x 97mm (H x W x D)
Power	5VDC, 2A max.
Emission	FCC CE
Temperature	Storage: -10 ~ 70°C, operating: 0 ~ 50°C
Humidity	5% ~ 90% non-condensing
Installation	Wall mount, DIN-rail, chassis installation



- 1. For connection to the Gigabit Ethernet products, please refer to the device's technical manual.
- Consult your dealer for DIN-rail or chassis installation.



#### **EC Declaration of Conformity**

For the following equipment:

\*Type of Product : 10/100/1000Base-T to 1000Base-SX/LX Media Converter

\*Model Number : GT-80xynn; GT-90xynn

(xy= 2, 2S, 5A or 6A, 6B, nn= 15, 60 or blank)

\* Produced by:

Manufacturer's Name : Planet Technology Corp.

Manufacturer's Address : 10F., No.96, Minquan Rd., Xindian Dist.,

New Taipei City 231, Taiwan (R.O.C.).

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive on 2014/30/EU.

For the evaluation regarding the EMC, the following standards were applied:

EN 55032	(2015+AC:2016)
EN 61000-3-2	(2014)
EN 61000-3-3	(2013)
EN 55024	(2010 + A1: 2015)
IEC 61000-4-2	(2008)
IEC 61000-4-3	(2006+A1:2007+A2:2010)
IEC 61000-4-4	(2012)
IEC 61000-4-5	(2014)
IEC 61000-4-6	(2013)
IEC 61000-4-8	(2009)
IEC 61000-4-11	(2004)
	,

Responsible for marking this declaration if the:

■ Manufacturer ■ Authorized representative established within the EU

Authorized representative established within the EU (if applicable):

Company Name: Planet Technology Corp.

Company Address: 10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)

Person responsible for making this declaration

Name, Surname Kent Kang
Position / Title : Director

Taiwan Jan. 25, 2017 Just Hard Place Date Level Signature

PLANET TECHNOLOGY CORPORATION