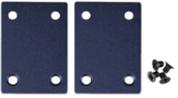


1. Package Contents

Thank you for purchasing PLANET industrial Gigabit Media Converter, IGT-805AT. In the following sections, the term "Industrial Gigabit Media Converter" mentioned in this user's manual also means the IGT-805AT.

Open the box of the Industrial Gigabit Media Converter and carefully unpack it. The box should contain the following items:

Industrial Gigabit Media Converter x 1	User's Manual x 1	Wall-mount Plate w/ Screws x 1
		
DIN-rail Bracket w/Screws x 1	RJ45 Dust Cap x 1	SFP Dust Cap x 1
		

If any of these are missing or damaged, please contact your dealer immediately; if possible, retain the carton including the original packing material, and use them again to repack the product in case there is a need to return it to us for repair.

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2. Product Specifications

Model	IGT-805AT
Hardware Specifications	
Copper Interface	1 x 10/100/1000BASE-T RJ45 TP Auto-MDI/MDI-X, auto-negotiation
Fiber Optic Interface	1 1000BASE-SX/LX/BX SFP interface. Compatible with 100BASE-FX SFP
Connector	Removable 6-pin terminal block Pin 1/2 for Power 1, Pin 3/4 for fault alarm, Pin 5/6 for Power 2
Alarm	Provides one relay output for power failure Alarm relay current carry ability: 1A @ DC 24V
LED	3 x LED for System and Power: ■ Green: DC Power 1 ■ Green: DC Power 2 ■ Red: Power Alarm 2 x LED for Per Copper Port: ■ Green: LNK/ACT ■ Green: 1000 LNK/ACT 1 x LED for Per SFP Interface ■ Green: LNK/ACT
ESD Protection	6KV DC
Enclosure	IP30 type metal case
Installation	DIN rail kit and wall mount ear
Dimensions (W x D x H)	32 x 87 x 135 mm

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Weight	395g
Power Requirements	DC 12~48V, redundant power with reverse polarity protection function. AC 24V power adapter
Power Consumption/Dissipation	2.6 watts/8.8BTU (DC 48V)
Converter Specifications	
Flow Control	Back pressure for half duplex. IEEE 802.3x pause frame for full duplex
Fabric	4Gbps
Throughput (packet per second)	2.97Mpps@64bytes
Maximum Transmission Unit	9216 bytes
Network Cables	10/100/1000BASE-T: Cat3, 4, 5, 5e, 6 UTP cable (100 meters, max.) EIA/TIA-568 100-ohm STP (100 meters, max.)
	1000BASE-SX: 50/125µm or 62.5/125µm multi-mode fiber optic cable, up to 550m (varying on SFP module)
	1000BASE-LX: 9/125µm single-mode fiber optic cable, up to 10/20/40/60/80/120 kilometers (varying on SFP module)

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Network Cables	100BASE-FX: 50/125µm or 62.5/125µm multi-mode fiber optic cable, up to 2 kilometers (varying on SFP module) 9/125µm single-mode fiber optic cable, up to 20/40/60 kilometers (varying on SFP module)
	100BASE-FX: 50/125µm or 62.5/125µm multi-mode fiber optic cable, up to 2 kilometers (varying on SFP module) 9/125µm single-mode fiber optic cable, up to 20/40/60 kilometers (varying on SFP module)
Standards Conformance	
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3z Gigabit Ethernet IEEE 802.3x full-duplex flow control
Regulatory Compliance	FCC Part 15 Class A, CE
Stability Testing	IEC 60068-2-32 (free fall) IEC 60068-2-27 (shock) IEC 60068-2-6 (vibration)
Environment	
Temperature	Operating: -40~75 degrees C Storage: -40~75 degrees C
Humidity	Operating: 5~95% (non-condensing) Storage: 5~95% (non-condensing)

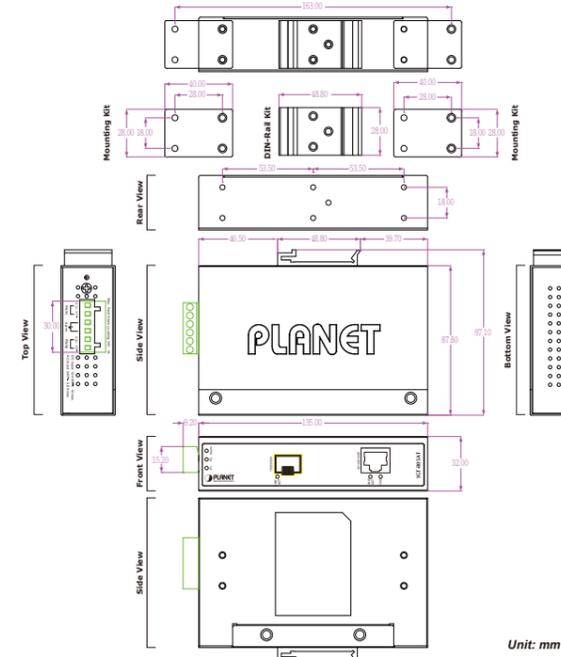
- 4 -

3. Hardware Introduction

3.1 Three-View Diagram

The three-view diagram of the Industrial Gigabit Media Converter consists of Ethernet interfaces and one **removable 6-pin terminal block**. The LED indicators are also located on the front panel.

■ IGT-805AT:



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■ Front Panel



SFP Port

100/1000BASE-X SFP port for transceiver module, enabling to have a networking distance of 550 meters to 2km (multi-mode fiber) and up to 10/20/40/60/80/120 kilometers (single-mode fiber or WDM fiber).

Gigabit TP Interface

10/100/1000BASE-T copper RJ45 twisted-pair with up to 100 meters in distance.

Figure 2: IGT-805AT Front Panel

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3.2 LED Indicators

■ System

LED	Color	Function
P1	Green	Lit: indicates power 1 has power.
P2	Green	Lit: indicates power 2 has power.
Alarm	Red	Lit: indicates either power 1 or power 2 has no power.

■ Per 100/1000BASE-X SFP Port

LED	Color	Function
LNK/ACT	Green	Lit: indicates the link through that port is successfully established at 100Mbps or 1000Mbps. Blinking: indicates that the Converter is actively sending or receiving data over that port.

■ Per 10/100/1000BASE-T Port

LED	Color	Function
LNK/ACT	Green	Lit: indicates that the Gigabit Ethernet Port is successfully connecting to the network at 10/100/1000Mbps. Blinking: indicates that the Gigabit Ethernet Port is actively sending or receiving data over that port.
1000 LNK/ACT	Green	Lit: indicates the link through that port is successfully established at 1000Mbps. Blinking: indicates that the Gigabit Ethernet Port is actively sending or receiving data over that port. Off: indicates the link through that port is successfully established at 10/100Mbps.

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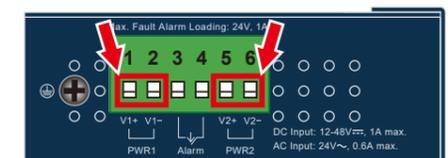
3.3 Wiring the Power Inputs

The terminal block connector on the top panel of Industrial Gigabit Media Converter is used for 12~48V DC power inputs. Please follow the steps below to insert the power wire.



When performing any of the procedures like inserting the wires or tightening the wire-clamp screws, make sure the power is OFF to prevent from getting an electric shock.

1. Insert positive/negative DC power wires into contacts 1 and 2 for POWER 1, or 5 and 6 for POWER 2.



2. Tighten the wire-clamp screws for preventing the wires from loosening.



1 2 3 4 5 6
Power 1 Alarm Power 2
+ - + -

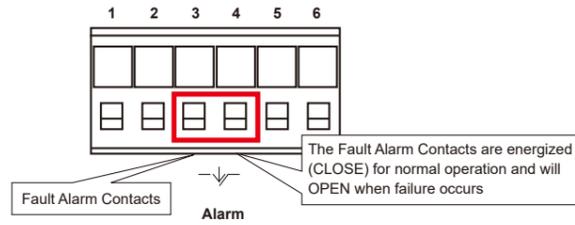
- 8 -



1. The wire gauge for the terminal block should be in the range between 12 and 24 AWG.
2. The DC power input range is 12V ~ 48V DC and supports 24V AC
3. Use one power input when using 24V AC

3.4 Wiring the Fault Alarm Contact

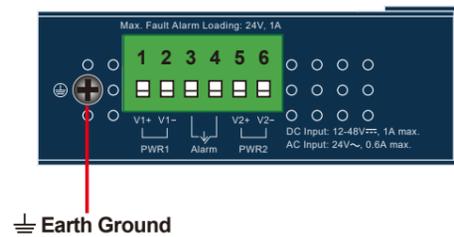
The fault alarm contacts are in the middle of the terminal block connector as the picture shows below. When inserting the wires, the Industrial Gigabit Media Converter will detect the fault status of the power failure and then forms an open circuit. The following illustration shows an application example for wiring the fault alarm contacts.



1. The wire gauge for the terminal block should be in the range of 12 ~ 24 AWG.
2. Alarm relay circuit accepts up to 24V, max. 1A currents.

3.5 Grounding the Device

Users **MUST** complete grounding wired with the device; otherwise, a sudden lightning could cause fatal damage to the device. EMD (Lightning) DAMAGE IS NOT COVERED UNDER WARRANTY.



4. Installation

This section describes the functionalities of the Industrial Gigabit Media Converter's components and guides how to install it on the DIN-rail and wall. Basic knowledge of networking is assumed. Please read this chapter completely before continuing.



This following pictures show the user how to install the device, and the device is not IGT-805AT.

4.1 DIN-rail Mounting Installation



4.2 Wall-mount Plate Mounting



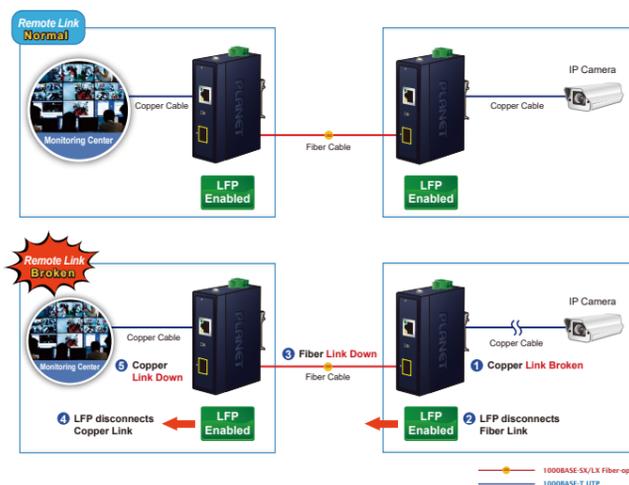
4.3 Side Wall-mount Plate Mounting



You must use the screws supplied with the wall-mounting brackets. Damage caused to the parts by using incorrect screws would invalidate your warranty.

5. Link Fault Passthrough

The LFP function includes Link Loss Carry Forward (LLCF), Link Loss Return (LLR) and turned on by chipset default. LLCF and LLR can immediately alarm administrators the issue of the link media and provide efficient solution to monitor the net.



LFP function is turned on by chipset default and this feature cannot be turned off. Please assure both TP and Fiber port connections have established to enable both TP and Fiber connections to link up.

www.PLANET.com.tw

Industrial 10/100/1000BASE-T to
100/1000BASE-X SFP Media Converter

IGT-805AT



PLANET Technology Corp.

10F., No. 96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan

Warning:
This device is compliant with Class A of CISPR 32.
In a residential environment this device may cause radio interference.
2350-AH1210-005



Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource on PLANET web site first to check if it could solve your issue. If you need more support information, please contact PLANET switch support team.

PLANET online FAQs:
<http://www.planet.com.tw/en/support/faq>

Switch support team mail address:
support@planet.com.tw