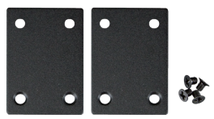
1. Package Contents

Thank you for purchasing PLANET compact industrial 5-port 10/100/1000T Gigabit Ethernet Switch, IGS-500T. In the following section, the term **"Industrial Gigabit Ethernet Switch"** means the IGS-500T.

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

Industrial Gigabit Ethernet Switch x 1	User's Manual x 1
	
Wall-mount Kit	**DIN-rail Kit**
	

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.

2. Product Features

Physical Port

- 5-port 10/100/1000BASE-T RJ45 with auto-MDI/MDI-X function

Layer 2 Features

- Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T Ethernet standard
- Supports auto-negotiation and 10/100Mbps half/full duplex and 1000Mbps full duplex
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- High-performance Store and Forward architecture, broadcast storm control and runt/CRC filtering eliminate erroneous packets to optimize the network bandwidth
- Backplane (switching fabric): 10Gbps
- Integrated address look-up engine, supporting 4K absolute MAC addresses
- 9K jumbo packet size
- Automatic address learning and address aging
- CSMA/CD Protocol

Industrial Case and Installation

- IP30 metal case
- DIN rail and wall-mount design
- 12 to 48V DC, redundant power with polarity reverse protect function and connective, removable terminal block for master and slave power; 24V AC power support
- Supports 6000 VDC Ethernet ESD protection
- -40 to 75 degrees C operating temperature
- Free fall, shock-proof and vibration-proof for industries

3. Product Specifications

Model	IGS-500T
Hardware Specifications	
Copper Ports	5 x 10/100/1000BASET RJ45 TP auto-MDI/MDI-X, auto negotiation
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 Fault 2 x LED for each copper port ● Green: 1000Mbps LNK/ACT ● Orange:10/100Mbps LNK/ACT
ESD Protection	6KV
EFT Protection	6KV
Power Requirements	12~48V DC, redundant power with polarity reverse protection function, 24V AC power support
Power Consumption / Dissipation	3.6 watts/12.35BTU
Installation	DIN-rail kit and wall-mount ear
Enclosure	IP30 metal case
Dimensions (W x D x H)	70 x 104 x 30 mm
Weight	252g

Switch Specifications	
Switch Processing Scheme	Store-and-Forward
Address Table	4K entries
Buffer Memory	1M bits on-chip buffer memory
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex
Switch Fabric	10Gbps
Throughput (packet per second)	7.4Mpps@64bytes
Jumbo Frame	9K
Network Cables	10/100/1000BASE-T Cat. 3, 4, 5, 5e, 6 UTP cable (max. 100 meters) EIA/TIA-568 100-ohm STP (max. 100 meters)
Standards Conformance	
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3x Full-Duplex Flow Control IEEE 802.3az Energy Efficient Ethernet IEEE 802.1p Class of Service
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: 5~90%, Storage: 5~90% (non-condensing)

4. Hardware Introduction

4.1 Three-View Diagram

The three-view diagram of the **Industrial Gigabit Ethernet Switch** consists of five auto-sensing 10/100/1000BASE-T **RJ45 port** and one **removable 6-pin terminal block**. The LED indicators are also located on the front panel.

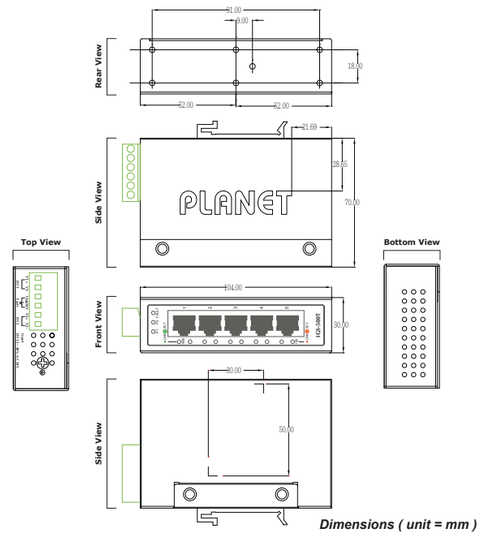


Figure 1: IGS-500T Three-View Diagram

Front View:

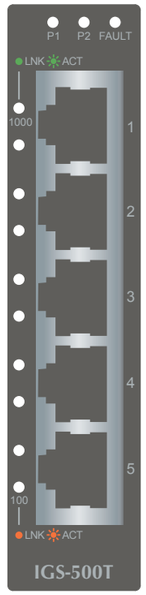


Figure 2: IGS-500T Front View

LED Definition:

LED	Color	Function
P1	Green	Lights to indicate power input 1 has power.
P2	Green	Lights to indicate power input 2 has power.
Fault	Red	Lights to indicate that power 1 or power 2 has failed.
1000 LNK/ACT	Green	**Lights**: Indicating the port is running at **1000Mbps** speed and successfully established.
		Blinks: Indicating that the switch is actively sending or receiving data over that port.
100 LNK/ACT	Orange	**Lights**: Indicating the port is running at **10/100Mbps** speed and successfully established.
		Blinks: Indicating that the switch is actively sending or receiving data over that port.

Top View:

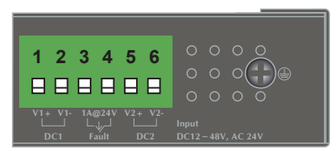


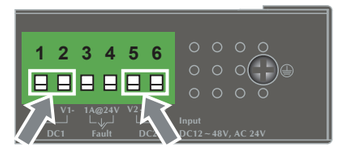
Figure 3: IGS-500T Top View

4.2 Wiring the Power Inputs

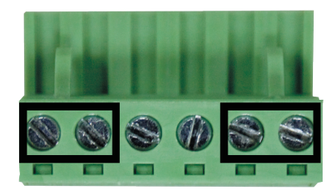
The 6-contact terminal block connector on the top panel of Industrial Gigabit Ethernet Switch is used for two DC redundant power inputs. Please follow the steps below to insert the power wire.

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



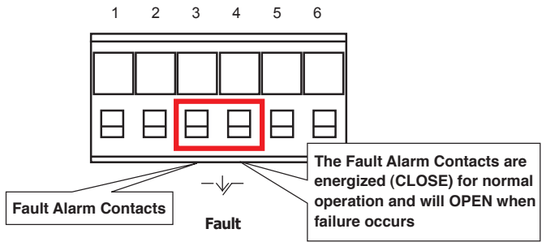
2. Tighten the wire-clamp screws for preventing the wires from loosening.



> Note
>
> 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. Please just use one power input when using 24V AC.

4.3 Wiring the Fault Alarm Contact

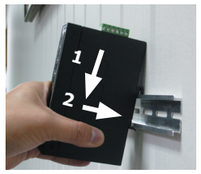
The fault alarm contacts are in the middle of the terminal block connector as the picture shows below. Inserting the wires, the Industrial Gigabit Ethernet Switch will detect the fault status of the power failure and then forms an open circuit. The following illustration shows an application example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



Note

1. The wire gauge for the terminal block should be in the range between 12 and 24 AWG.
2. Alarm relay circuit accepts up to 24V DC,1A.

Step 2: Lightly insert the bottom of the switch into the track



Step 3: Make sure the DIN rail is tightly secured on the track.

Step 4: Please refer to the following procedure to remove the Industrial Gigabit Ethernet Switch from the track.

Step 5: Lightly pull out the bottom of the switch for removing it from the track.

5. Installation

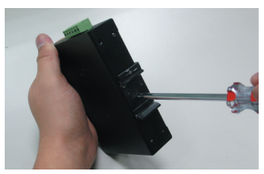
This section describes the functionalities of the Industrial Gigabit Ethernet Switch's components and guides you to installing it on the DIN rail and wall. Please read this chapter completely before continuing.

This following picture tells the user how to install the device, and the device is not IGS-500T.

5.1 DIN-rail Mounting Installation

The DIN rail is screwed on the Industrial Gigabit Ethernet Switch when out of factory. When replacing the wall-mount application with DIN-rail application, Industrial Gigabit Ethernet Switch is needed. Please refer to the following figures to screw the DIN rail on it. To hang the Industrial Gigabit Ethernet Switch, follow the following steps:

Step 1: Screw the DIN rail on the Industrial Gigabit Ethernet Switch.

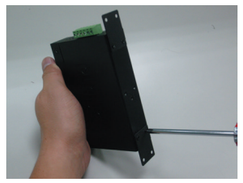


5.2 Wall-mount Plate Mounting

To install the Industrial Gigabit Ethernet Switch on the wall, please follow the instructions described below.

Step 1: To remove the DIN rail from the Industrial Gigabit Ethernet Switch, loosen the screws.

Step 2: Place the wall-mount plate on the rear panel of the Industrial Gigabit Ethernet Switch.



Step 3: Use the screws to screw the wall-mount plate on the Industrial Gigabit Ethernet Switch.

Step 4: Use the hook holes at the corners of the wall-mount plate to hang the Industrial Gigabit Ethernet Switch on the wall.

Step 5: To remove the wall-mount plate, reverse the steps above.

PLANET Networking & Communication

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User's Manual

Industrial Switch

IGS-500T

www.PLANET.com.tw

Compact Industrial 5-Port 10/100/1000Mbps Gigabit Ethernet Switch

PLANET Technology Corp.
11F., No. 96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan

2350-AH0810-000

1000 Mbps | Compact Size | Auto MDI/MDI-X | Redundant Power | IP Code 30 | 75°C -40°C

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.php

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

PLANET Networking & Communication

EC Declaration of Conformity

For the following equipment:

*Type of Product : Industrial 5-Port 10/100/1000T Compact Gigabit Ethernet Switch
*Model Number : IGS-500T
* 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)
EN61000-3-2	(2014)
EN61000-3-3	(2013)
EN 55024	(2010 + A1:2015)

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 *Place* **June 28, 2017** *Date* *Legal Signature*

PLANET TECHNOLOGY CORPORATION
e-mail: sales@planet.com.tw http://www.planet.com.tw
10F., No.96, Minquan Rd., Xindian Dist., New Taipei City, Taiwan, R.O.C. Tel:886-2-2219-9518 Fax:886-2-2219-9528