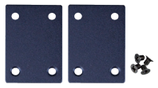
1. Package Contents

Thank you for purchasing PLANET industrial compact 5-port Gigabit Ethernet Switch, IGS-500T/IGS-510TF. In the following section, the term **"Industrial Gigabit Ethernet Switch"** means the IGS-500T or IGS-510TF.

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 x 1
		
DIN-rail Kit x 1	RJ45 Dust Caps	SFP Dust Cap x 1 (IGS-510TF only)
	 IGS-500T x 5 IGS-510TF x 4	

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 Specifications

Model	IGS-500T	IGS-510TF
Hardware Specifications		
Copper Ports	5 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports	4 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
SFP Slot	--	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	Removable 4-pin terminal block Pin 1/2 for Power 1; Pin 3/4 for Power 2
Alarm	One relay output for power failure. Alarm relay current carry ability: 1A@DC 24V	--
Power Requirements	12~48V DC, redundant power with reverse polarity protection function, 24V AC power support	9~48V DC, redundant power with reverse polarity protection function, 24V AC power support

Power Consumption (Ethernet Full Loading)	Max. 3.6 watts/12.28BTU	Max. 4.3 watts/14.67BTU
Dimensions (W x D x H)	30 x 70 x 104 mm	
Weight	252g	270g
Enclosure	IP30 metal case	
Installation	DIN-rail kit and wall-mount kit	
ESD Protection	6KV	
EFT Protection	6KV	
Switch Specifications		
Switch Architecture	Store-and-Forward	
Switch Fabric	10Gbps	
Throughput (packet per second)	7.4Mpps@64bytes	
Address Table	4K entries	
Buffer Memory	1M bits on-chip buffer memory	
Jumbo Frame	9Kbytes	
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex	

Standards Conformance		
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)	
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3az Gigabit SX/LX (IGS-510TF only) IEEE 802.3x Full-Duplex Flow Control IEEE 802.3az Energy Efficient Ethernet (EEE) IEEE 802.1p Class of Service	
Environment		
Temperature	Operating: -40~75 degrees C Storage: -40~75 degrees C	
Humidity	Operating: 5~90% (non-condensing) Storage: 5~90% (non-condensing)	

3. Hardware Introduction

3.1 Switch Front Panel

The front Panels of the Industrial Gigabit Ethernet Switches consist of Ethernet interfaces and LED indicators.

■ Front View

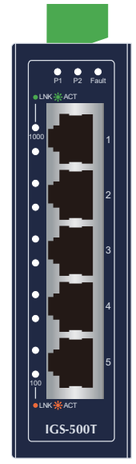


Figure 1:
IGS-500T Front View

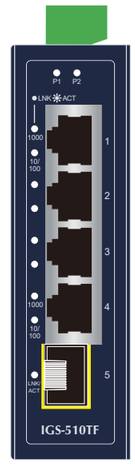


Figure 2:
IGS-510TF Front View

3.2 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. (For IGS-500T only)
1000 LNK/ACT	Green	Lights to indicate the port is running at 1000Mbps speed and successfully established.
		Blinks to indicate that the Switch is actively sending or receiving data over that port.
100 LNK/ACT	Amber	Lights to indicate the port is running at 10/100Mbps speed and successfully established.
		Blinks to indicate that the Switch is actively sending or receiving data over that port.

3.3 Switch Upper Panel

The upper panels of the Industrial Gigabit Ethernet Switches consist of one terminal block connector within two power input.

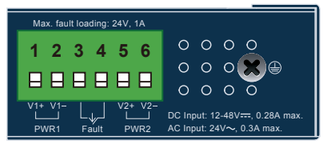


Figure 3: IGS-500T Top View

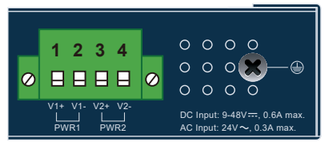


Figure 4: IGS-510TF Top View

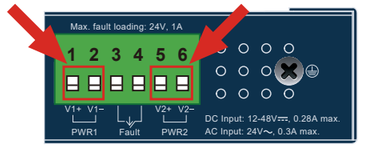
3.4 Wiring the Power Inputs

The 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.

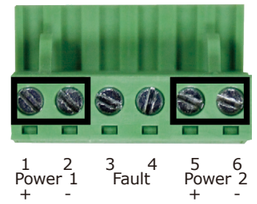
Caution	When performing any of the procedures like inserting the wires or tightening the wire-clamp screws, make sure the power is OFF to prevent from getting an electric shock.

[IGS-500T]

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

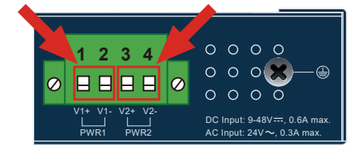


2. Tighten the wire-clamp screws for preventing the wires from loosening.

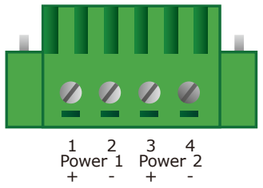


[IGS-510TF]

1. Insert positive and negative DC power wires into contacts 1 and 2 for POWER 1, or contacts 3 and 4 for POWER 2.



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



Note

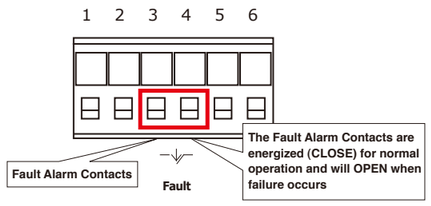
The wire gauge for the terminal block should be in the range between 12 and 24 AWG.

Note

1. The power input range is **12V ~ 48V DC** for IGS-500T, **9 ~ 48V** DC for IGS-510TF and supports **24V AC**.
2. Use one power input when using 24V AC.

3.5 Wiring the Fault Alarm Contact (IGS-500T Only)

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.

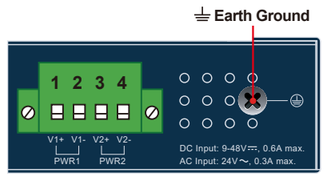


Note

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.

3.6 Grounding the Device

Users MUST complete grounding wired with the device; otherwise, a sudden lightning could cause fatal damage to the device.



Note

EMD (Lightning) DAMAGE IS NOT CONVERED UNDER WARRANTY.

4. Installation

This section guides you to installing the Industrial Gigabit Ethernet Switch on the DIN rail and wall. Please read this chapter completely before continuing.

Note

This following pictures show how to install the device. However, the device in the picture is not IGS-500T or IGS-510TF.

4.1 DIN-rail Mounting Installation

4.2 Wall-mount Plate Mounting

4.3 Side Wall-mount Plate Mounting (IGS-510TF Only)

Caution

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. Three-View Diagram

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

■ IGS-500T

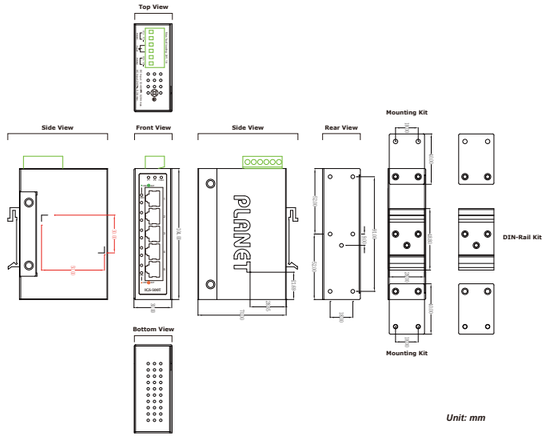


Figure 5: IGS-500T Three-View Diagram

■ IGS-510TF

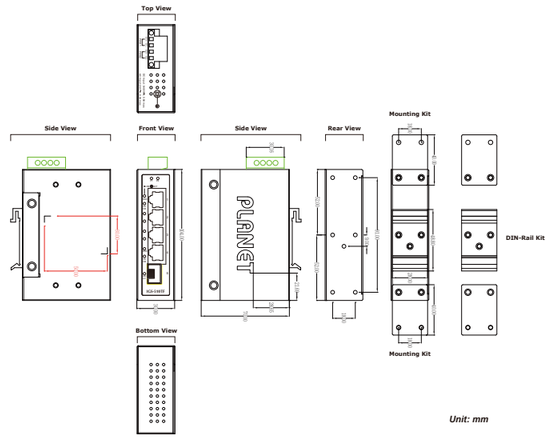


Figure 6: IGS-510TF Three-View Diagram

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

PLANET Networking & Communication

PLANET Networking & Communication

User's Manual

www.PLANET.com.tw

Industrial Compact 5-Port Gigabit Ethernet Switch

IGS-500T/IGS-510TF

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