Compact Industrial 5-Port 10/100/1000T Ethernet Switch

IGS-500T-E

User's Manual

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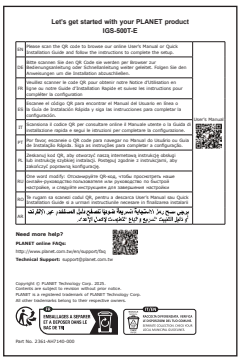
1. Package Contents

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

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

Industrial Ethernet Switch x 1	QR Code Sheet x 1
	

DIN-rail Kit	Wall-mount Kit	RJ45 Dust Cap x 5
		

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

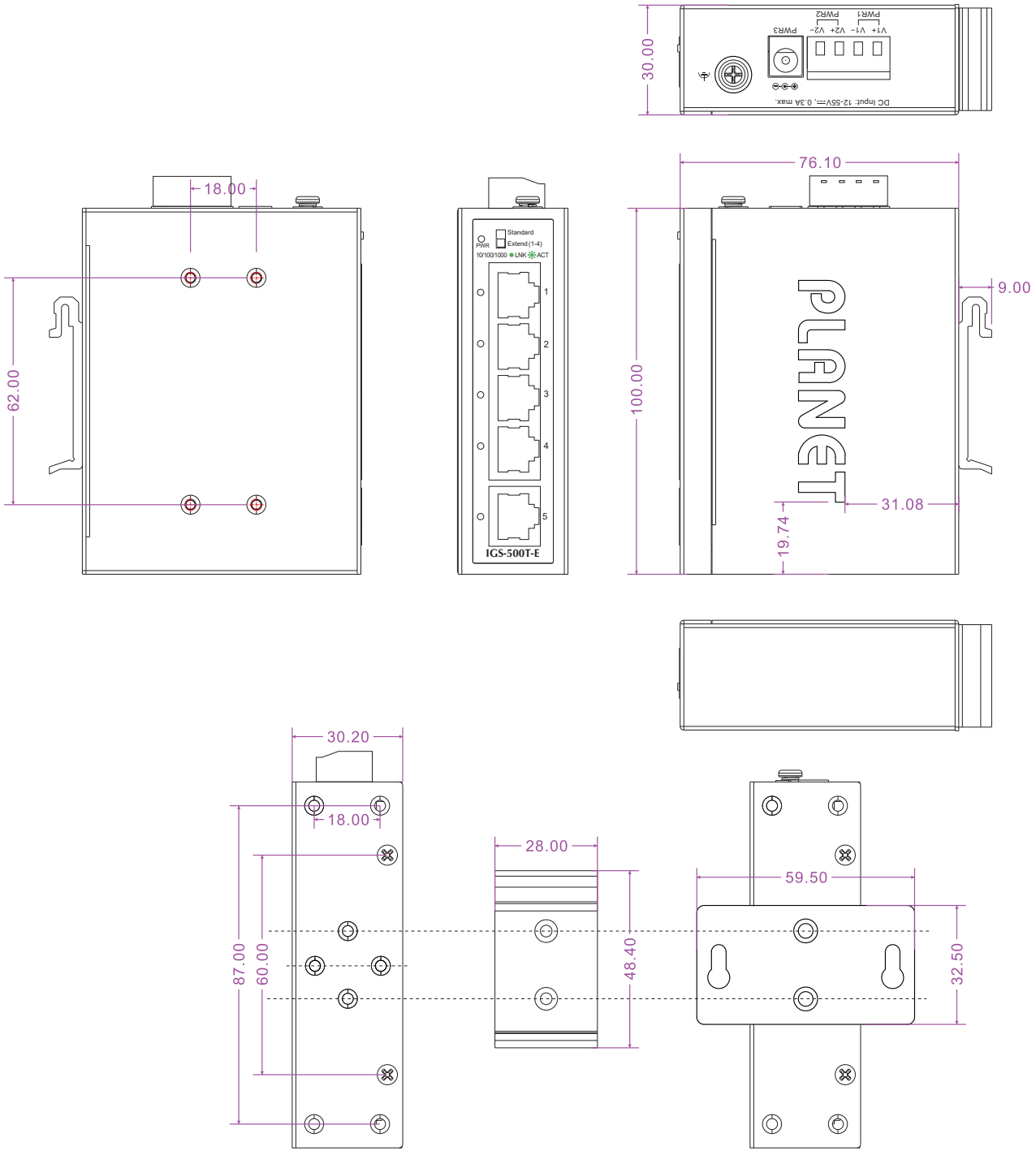
Product	IGS-500T-E
Hardware Specifications	
Copper Ports	5 x 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports, auto negotiation
DIP Switch	**Standard:** In the normal mode, all interfaces can communicate with each other. Transmission distance is within 100 meters, and transmission rate is 10/100/1000Mbps. **Extend:** In the link extension mode, the data transmission distance for Ports 1-4 can be extended to 250 meters, and transmission speed is 10Mbps.
Connector	Removable 4-pin terminal block for power input Pin 1/2 for Power 1, Pin 3/4 for Power 2 One for DC jack with central pole 2.1mm with Power 3
Power Requirements	12~55V DC (with polarity protection) Redundant power support
Power Consumption	Max. 1.65 watts/5.63 BTU (Ethernet full loading)
ESD Protection	6KV DC
Enclosure	IP40 metal case
Dimensions (W x D x H)	30.2 x 76.1 x 100 mm
Weight	266g
Installation	DIN-rail kit and wall-mount kit
LED Indicator	System: Power (Green) 10/100/1000T RJ45 Ports: 10/100/1000T LNK/ACT (Green)

Standards Conformance	
Switch Architecture	Store-and-Forward
Switch Fabric	10Gbps (non-blocking)
Throughput (packet per second)	0.744Mpps@64 bytes
Address Table	2K entries
Shared Data Buffer	3M bits
Flow Control	IEEE 802.3x pause frame for full duplex Back pressure for half duplex
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Stability Testing	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T IEEE 802.3x flow control and back pressure IEEE 802.3az Energy Efficient Ethernet (EEE)
Environment	
Operating Temperature	-40 ~ 75 degrees C
Storage Temperature	-40 ~ 85 degrees C
Operating Humidity	10 ~ 90% (non-condensing)
Storage Humidity	5 ~ 95% (non-condensing)

3. Hardware Introduction

3.1 Three-View Diagram

The three-view diagram of the **Industrial Ethernet Switch** consists of five auto-sensing 10/100/1000BASE-T **RJ45 ports** and one **removable 4-pin terminal block**. The LED indicators are also located on the front panel.



Dimensions (W x D x H): 30.2 x 76.1 x 100 mm

Figure 1: IGS-500T-E Three-View Diagram

3.2 Front View

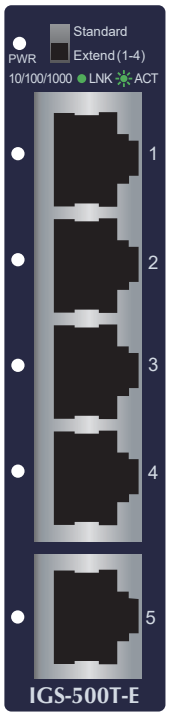


Figure 2: IGS-500T-E Front View

3.3 LED Definition:

■ System

LED	Color	Function
PWR	Green	**Lights** to indicate DC power input has power.

■ Per 10/100/1000BASE-T Port

LED	Color	Function	
10/100/1000 LNK/ACT	Green	**Lights**	Indicating the port is running at **10/100/1000Mbps** and successfully established.
		Blinks	Indicating that the switch is actively sending or receiving data over that port.

3.4 Top View

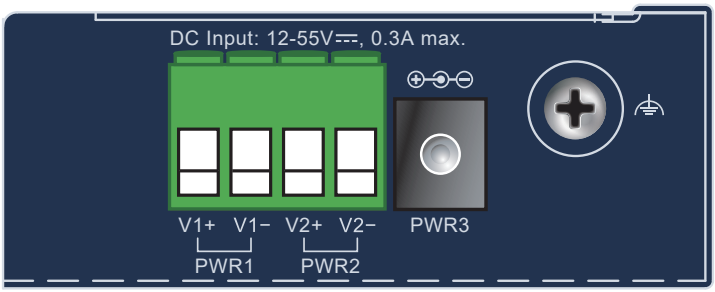


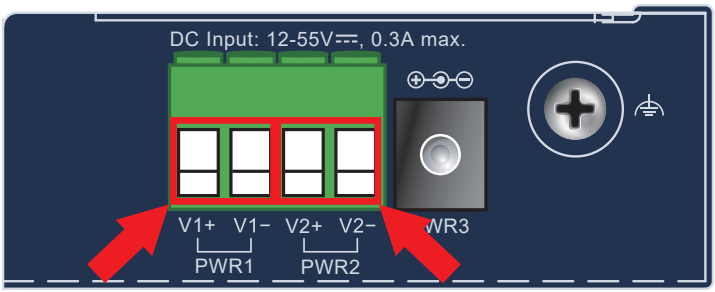
Figure 3: IGS-500T-E Top View

3.5 Wiring the Power Inputs

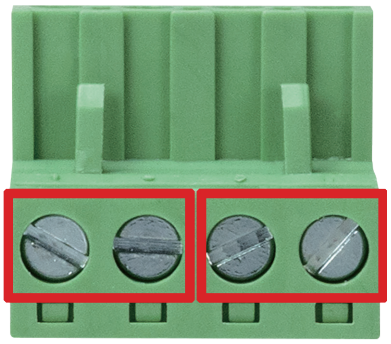
The 4-contact terminal block connector on the top panel of Industrial Ethernet Switch is used for two DC redundant power inputs. Please follow the steps below to insert the power wire.

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.

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.



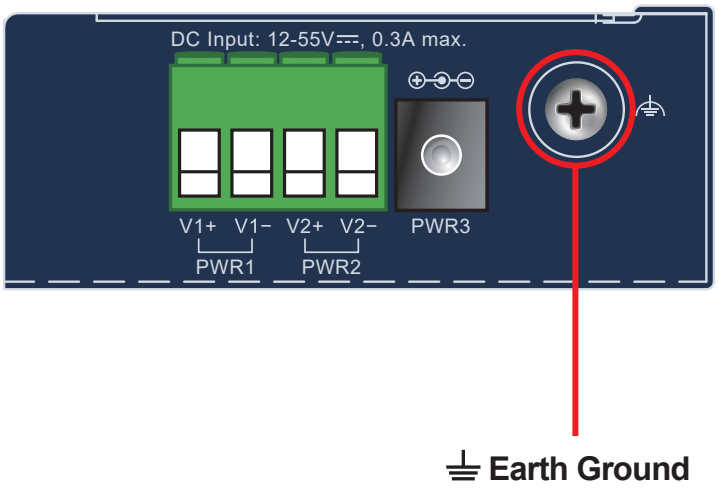
1 2 3 4
Power 1 Power 2
+ - + -

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 ~ 55V DC.

3.6 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.



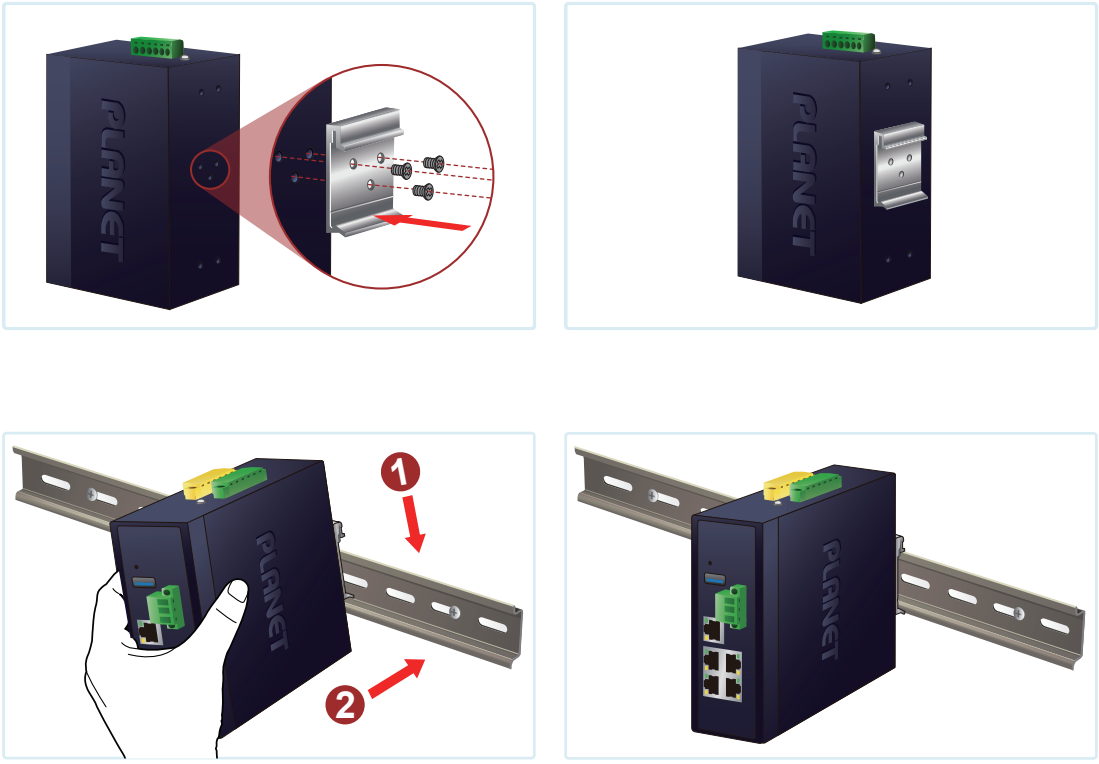
4. Installation

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

Note

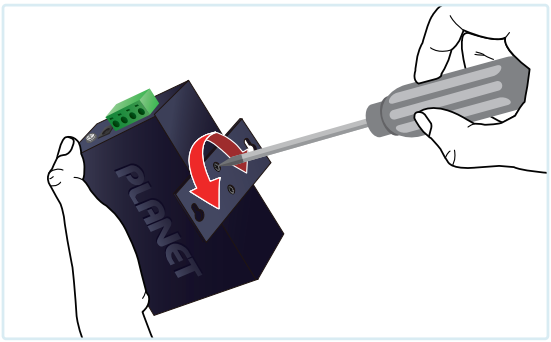
This following pictures show the user how to install the device, and the device is not IGS-500T-E.

4.1 DIN-rail Mounting Installation



Place the bracket on the back of the device and with the given 3 screws, tighten them. Slide the device with the bracket mounted through the DIN-rail to finish the installation.

4.2 Wall-mount Plate Mounting



Place the mounting plate on the back of the device, and tighten it with the given screws. Then put the device with the plate mounted on the wall, and screw them to finish the installation.

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. 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:
https://www.planet.com.tw/en/support/faq.php

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

Trademarks

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FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the Instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at whose own expense.

CE Mark Warning

This device is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

WEEE Warning

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Energy Saving Note of the Device

This power required device does not support Standby mode operation. For energy savings, please remove the DC plug or slide the hardware-based Power Switch to the OFF position to disconnect the device from the power circuit. Without removing the DC plug from or switching off the device, the device will still consume power from the power source. In view of Saving the Energy and reducing the unnecessary power consumption, it is strongly suggested to power off or to remove the DC plug from the device if this device is not intended to be active.