1. Package Contents

Thank you for purchasing PLANET Compact Industrial 4-Port 10/100/1000T + 1-Port 100/1000X SFP Gigabit Ethernet Switch, IGS-510TF. In the following sections, the term **"Industrial Gigabit Ethernet Switch"** means the 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 x 4	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.

2. Product Specifications

Model	IGS-510TF
Hardware Specifications	
Copper 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 4-pin terminal block Pin 1/2 for Power 1; Pin 3/4 for Power 2
Power Requirements	**9~48V DC**, redundant power with reverse polarity protection, **24V AC** power support
Power Consumption (Ethernet Full Loading)	Max. 2.4 watts/8.1BTU
Dimensions (W x D x H)	70 x 104 x 30 mm
Weight	239g
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	2K entries
Buffer Memory	4M 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 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 Panel of the Industrial Gigabit Ethernet Switch consists of Ethernet interfaces and LED indicators.
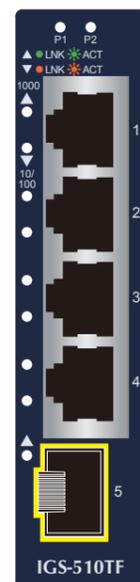
■ Front View

Figure 1: 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.
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.
10/100 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 panel of the Industrial Gigabit Ethernet Switch consists of one terminal block connector within two power input.
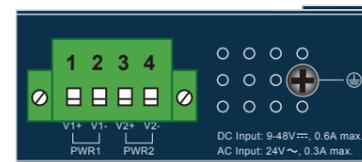

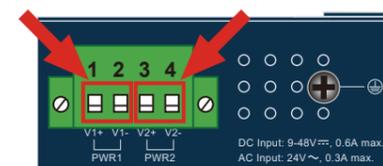**Figure 2:** IGS-510TF Top View

3.4 Wiring the Power Inputs

The terminal block connector on the top panel of Industrial Gigabit Ethernet Switch is used for two redundant power inputs. Please follow the steps below to insert the power wire.
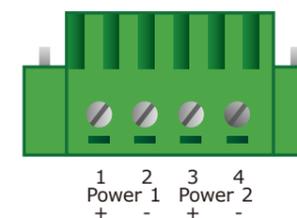
> ⚠ **Caution**
> When performing any of the procedures like inserting the wires or tightening the wire-clamp screws, make sure the power is OFF to prevent from getting an electric shock.

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.

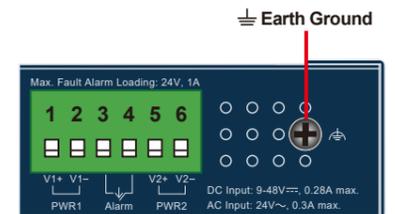> 📝 **Note**
> The wire gauge for the terminal block should be in the range between 12 and 24 AWG.

> 📝 **Note**
> 1. The power input range is **9V ~ 48V DC** for Industrial Gigabit Ethernet Switch and supports **24V AC**
> 2. Use one power input when using 24V AC.

3.5 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 COVERED 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-510TF.

4.1 DIN-rail Mounting Installation

4.2 Wall-mount Plate Mounting

4.3 Side Wall-mount Plate Mounting

⚠️ 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 100/1000X **SFP slot**, and one **removable terminal block**. The LED indicators are also located on the front panel.
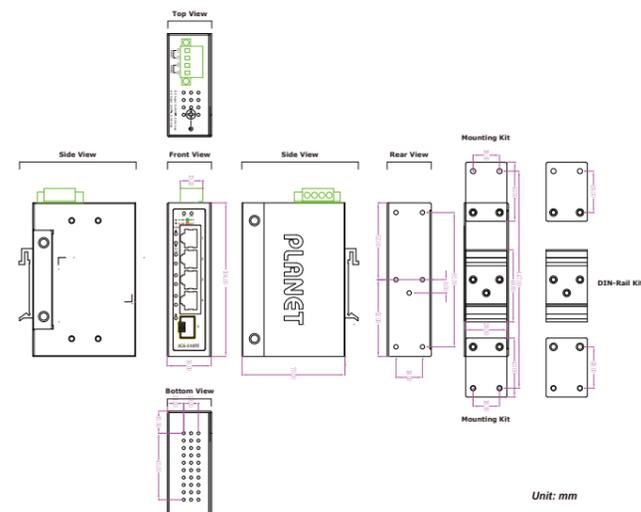
■ IGS-510TF

Figure 3: 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

FCC Warning

This device 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 his own expense.

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

Industrial Compact 4-Port 10/100/1000T + 1-Port 100/1000X SFP Gigabit Ethernet Switch

▶ IGS-510TF

www.PLANET.com.tw

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-AH0810-002

EC Declaration of Conformity

I hereby confirm that the following equipment complies 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).

Type of Product:
Industrial Compact 4-Port 10/100/1000T + 1-Port 100/1000X SFP Gigabit Ethernet Switch

Model:
IGS-510TF

Produced by:
Manufacturer's Name: **Planet Technology Corporation**
Manufacturer's Address: 10F., No.96, Minquan Rd., Xindian Dist.,
New Taipei City 231, Taiwan, R.O.C.

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

EN 55032	(2015 + AC:2016)
EN 55024	(2010 + A1:2015)
EN 55035	(2017)

Person responsible for making this declaration
Name: Kent Kang
Title: Director

Taiwan	**March 23, 2020**	
Country	*Date*	*Legal Signature*

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