5-/8-Port 10/100Mbps
Industrial Fast Ethernet Switch

ISW-501T/ISW-801T

User's Manual

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1. Package Contents

Thank you for purchasing PLANET Industrial Ethernet Switch, ISW-501T/ISW-801T. In the following sections, the term **"Industrial Ethernet Switch"** means the ISW-501T or ISW-801T.

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 Bracket w/ Screws x 1	RJ45 Dust Cap	Wall-mount Plate w/ Screws x 1 set
	 ISW-501T*5 / ISW-801T*8	

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. Hardware Introduction

2.1 Switch Front Panel

The front panel of the **Industrial Ethernet Switch** consists of Ethernet interfaces and LED indicators.

■ Front View

Figure 1: ISW-501T Front View	**Figure 2**: ISW-801T Front View
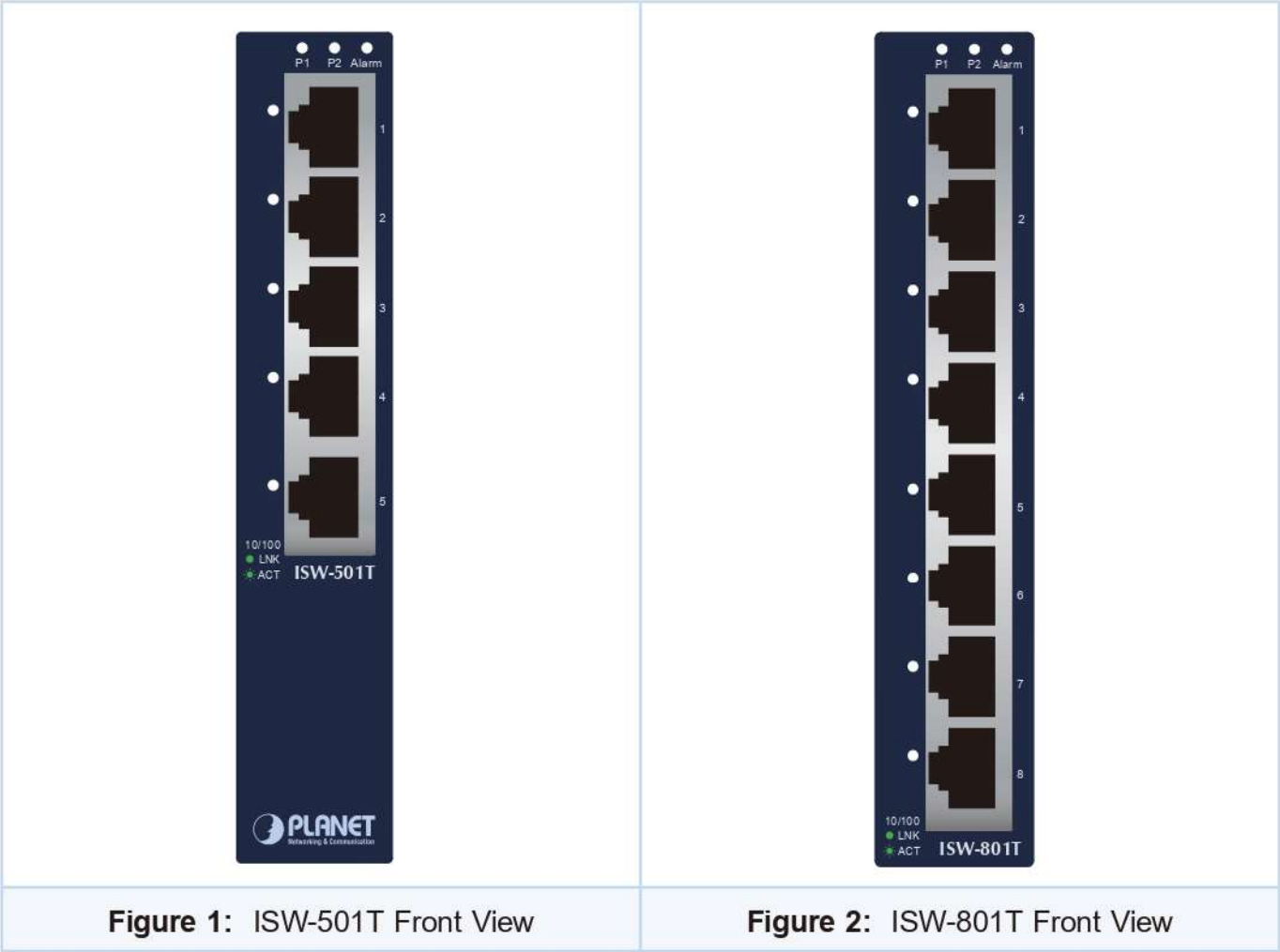
2.2 LED Indicators

■ System

LED	Color	Function
DC1	Green	**Lights:** to indicate DC power input 1 has power.
DC2	Green	**Lights:** to indicate DC power input 2 has power.
Alarm	Red	**Lights:** to indicate that AC or DC power has failed.

■ Per 10/100BASE-TX Port

LED	Color	Function
10/100 LNK/ACT	Green	**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.

2.3 Switch Upper Panel

The upper panel of the Industrial Ethernet Switch consists of one terminal block connector within two DC power inputs.

Figure 3 shows the upper panel of the Industrial Ethernet Switch.
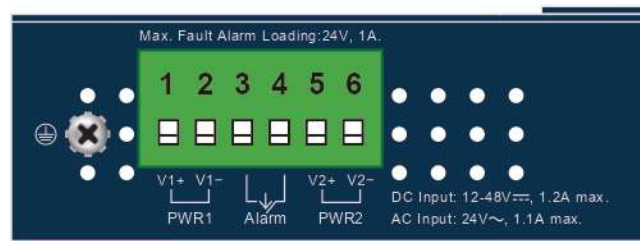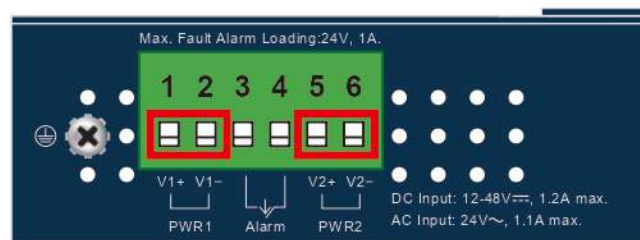

**Figure 3**: ISW-501T and ISW-801T Top View

2.4 Wiring the Power Inputs

The Upper Panel of the Industrial Ethernet Switch indicates a DC inlet power socket and consists of one terminal block connector within 6 contacts. Please follow the steps below to insert the power wire.

1. Insert positive/negative DC power wires into Contacts 1 and 2 for Power 1, or 5 and 6 for Power 2.
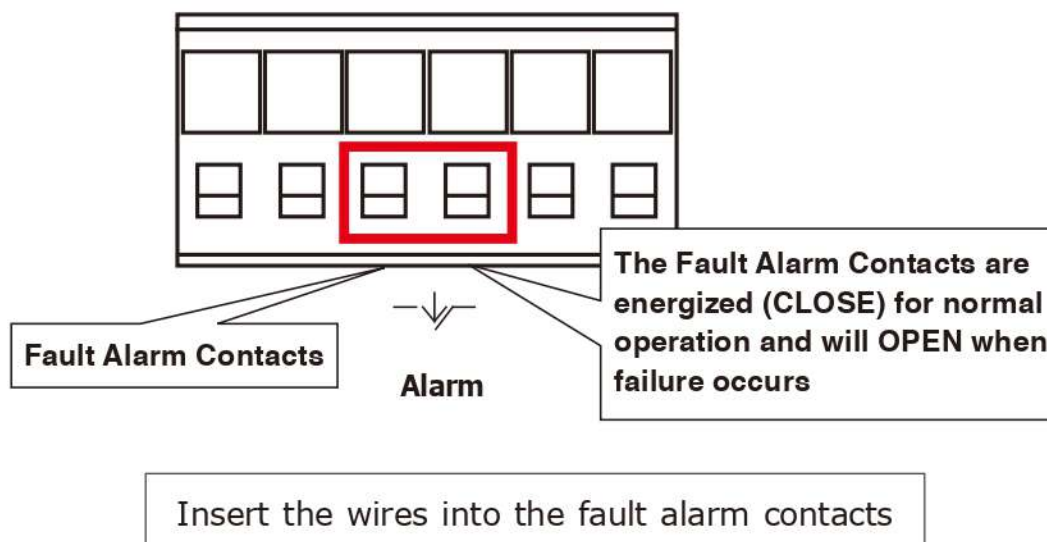
2. Tighten the wire-clamp screws for preventing the wires from loosening.

1	2	3	4	5	6
V1+	V1-			V2+	V2-
Power 1			Alarm	Power 2	
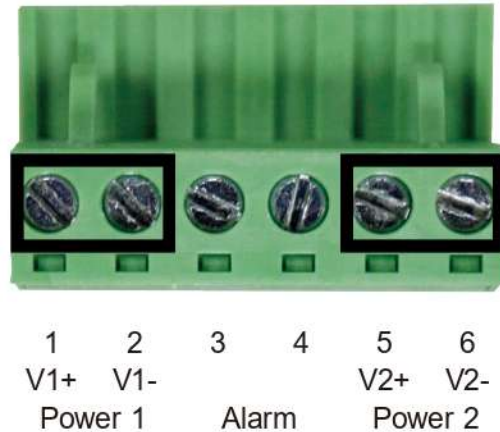
> **Note**
>
> 1. The wire gauge for the terminal block should be in the range between 12 and 24 AWG.
> 2. The power input range is DC 12V ~ 48V and supports AC 24V.
> 3. Use one power input when using AC 24V.

2.5 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 Ethernet Switch will detect the fault status of the power failure, or port link failure and then forms an open circuit. The following illustration shows an application example for wiring the fault alarm contacts.

Fault Alarm Contacts

Alarm

The Fault Alarm Contacts are energized (CLOSE) for normal operation and will OPEN when failure occurs

Insert the wires into the fault alarm contacts

2.6 Grounding the Device

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

⏚ **Earth Ground**
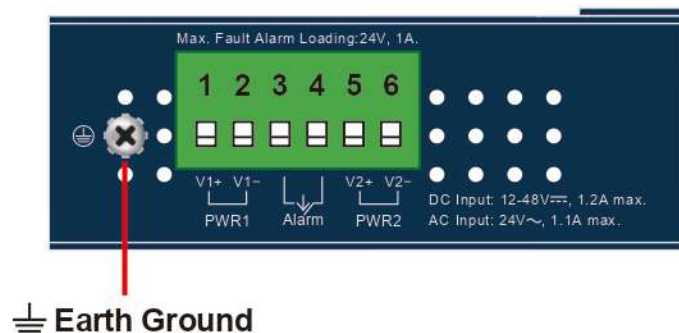
3. Installation

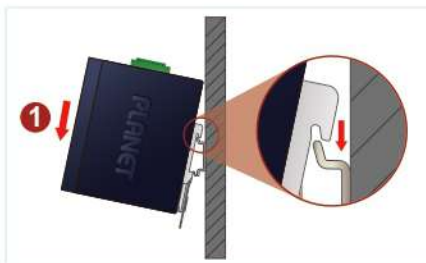This section describes the functionalities of the Industrial Ethernet Switch's components and guides you to installing it on the DIN rail and wall. Please read this chapter completely before continuing.
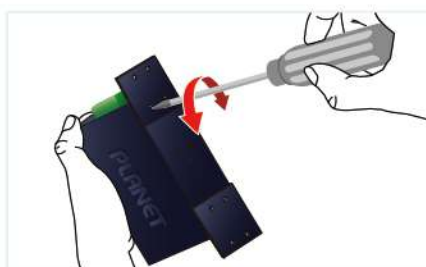
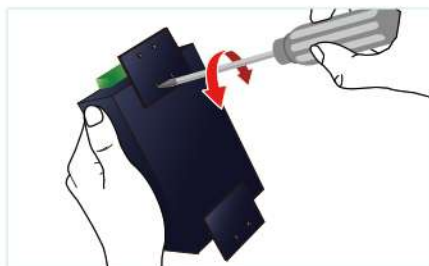|	
Note	This following pictures show how to install the device. However, the device in the picture is not ISW-501T or ISW-801T.

3.1 DIN-rail Mounting Installation

3.2 Wall-mount Plate Mounting

3.3 Side Wall-mount Plate Mounting

4. Product Specifications

Model	ISW-501T	ISW-801T
Hardware Specifications		
Hardware Version	3	
Copper Ports	5 x 10/100BASE-TX RJ45 TP auto-MDI/MDI-X, auto negotiation	8 x 10/100BASE-TX 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 Alarm 1 x LED for each copper port: ■ Green: 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	Max. 0.9 watts/3.07BTU (Power on without any connection) Max. 1.6 watts/5.45BTU (Ethernet full loading)	Max. 0.9 watts/3.07BTU (Power on without any connection) Max. 2.1 watts/7.16BTU (Ethernet full loading)
Installation	DIN-rail kit and wall-mount ear	
Enclosure	IP30-rated metal case	
Dimensions (W x D x H)	32 x 87 x 135mm	
Weight	400g	428g
Switch Specifications		
Switch Processing Scheme	Store-and-Forward	

Address Table	1K
Shared Data Buffer	448K bits
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex
Switch Fabric	1Gbps	1.6Gbps
Throughput (packet per second)	0.74Mpps	1.19Mpps
Network Cables	10/100BASE-TX 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 802.3x Full Duplex Flow Control IEEE 802.3az Energy Efficient Ethernet PROFINET protocol
Regulatory Compliance	FCC Part 15 Class A, CE
Stability Testing	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)
Environment	
Temperature	Operating: -40~75 degrees C Storage: -40~75 degrees C
Humidity	Operating: 5% to 95%, Storage: 5% to 95% (non-condensing)

5. Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource at 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

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