#### **1.1 Package Contents**

Check the contents of your package for the following parts:

- $\bullet$  Industrial Fast Ethernet Switch x 1
- User's Manual x 1
- DIN Rail Kit x 1
- Wall-mount Kit 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.

#### **1.2 Product Features**

#### Physical Port

- 5-port 10/100BASE-TX RJ45 with auto MDI/MDI-X function (ISW-501T)
- 8-port 10/100BASE-TX RJ45 with auto MDI/MDI-X function (ISW-801T)

#### **1.3 Product Specifications**

Model	ISW-501T	ISW-801T	
Hardware Specifications			
10/100BASE-TX Ports	5	8	
LED Indicators	3 x LED for System and Power: Green: DC Power 1 Green: DC Power 2 Green: Power Fault 1 x LED per Copper Port Green: 10/100 LNK/ACT		
Enclosure	IP30-rated metal case		
Dimensions (W x D x H)	135 x 87 x 32 mm		
Weight	400g	428g	
ESD Protection	6KV DC		
EFT Protection	6KV DC		
Power Requirements	12~48V DC, redundant power with polarity reverse protection function, 24V AC power support		
Power Consumption/ Dissipation	1.6 watts/5.4BTU	2.1 watts/7.1BTU	
Installation	DIN rail kit and wall-mount ear		
Alarm	Provides one relay output for power failure Alarm relay current carry ability: 3A @ DC 30V		
Connector	Removable 6-pin terminal block Pin 1/2 for Power 1; Pin 3/4 for fault alarm; Pin 5/6 for Power 2		

- 3 -

Switch Specifications		
Switch Processing Scheme	Store-and-Forward	
Address Table	1К	
Buffer Memory	Embedded 448K bits packet buffer	
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	10BASE-T: 2-pair UTP Cat. 3, 4, 5, up to 100 meters 100BASE-TX: 2-pair UTP Cat. 5, 5e up to 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	
Temperature	Operating: -40~75 degrees C Storage: -40~75 degrees C	
Humidity	Operating: 5% to 95%, Storage: 5% to 95% (non-condensing)	
Regulatory Compliance	FCC Part 15 Class A, CE	
Stability Testing	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)	

## 2. Hardware Introduction

#### 2.1 Switch Front Panel

Figures 2-1 and 2-2 show the front panels of Industrial Fast Ethernet Switches.





Figure 2-1: ISW-501T Front Figure 2-1: Panel

Figure 2-2: ISW-801T Front Panel

- 5 -

#### 2.2 LED Indicators

LED	Color	Function	
P1	Green	Lit: indicates Power 1 has power.	
P2	Green	Lit: indicates Power 2 has power.	
FAULT	Green	Lit: indicates either Power 1 or Power 2 has no power.	
10/100 LNK/ ACT	Green	<ul> <li>Lit: indicates the port is successfully connecting to the network at 100Mbps or 10Mbps.</li> <li>Off: indicates that the port is not successfully connecting to the network at 100Mbps or 10Mbps.</li> <li>Blinking: indicates that the port is actively sending or receiving data.</li> </ul>	

#### 2.3 Switch Upper Panel

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

Figure 2-3 shows the upper panel of the Industrial Fast Ethernet Switch.

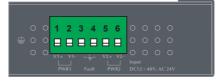


Figure 2-3: Industrial Fast Ethernet Switch Upper Panel

Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX Ethernet standard

- 1 -

- Supports auto-negotiation and 10/100Mbps half/full duplex mode
- High performance Store and Forward architecture, runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- Backplane (switching fabric): ISW-501T: 1Gbps, ISW-801T: 1.6Gbps
- > Automatic address learning and address aging
- Industrial Case & 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
- Lower Power Consumption device under full loading operation mode
- Supports EFT protection for 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- ➢ -40 to 75 degrees C operating temperature
- > Free fall, shock-proof and vibration-proof for industries

## 3. Installation

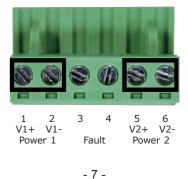
#### 3.1 Wiring the Power Inputs

The Upper Panel of the Industrial Fast 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.





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

### 3.2 Wiring the Fault Alarm Contact

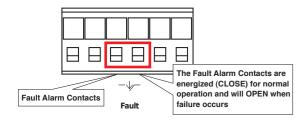
The fault alarm contacts are in the middle of the terminal block connector as the picture shows below. Inserting the wires, the Industrial Fast Ethernet Switch will detect the fault status of the power failure and then forms an open circuit. The following illustration shows an application example for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



Insert the wires into the fault alarm contacts



 The wire gauge for the terminal block should be in the range between 12 and 24 AWG.
 Alarm relay circuit accepts up to 30V, max. 3A currents.



### 3.3 DIN-rail Mounting Installation

The DIN rail is screwed on the Industrial Fast Ethernet Switch when out of factory. When you need to replace the wall mount application with DIN-rail application on Industrial Fast Ethernet, please refer to the following figures to screw the DIN rail on the Industrial Fast Ethernet Switch. To hang the Industrial Fast Ethernet Switch, follow the steps below:



- 9 -

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



Step 2: Place the bottom of DIN rail lightly into the track.



- Step 3: Check whether the DIN rail is tightly on the track.
- Step 4: Please refer to the following procedures to remove the Industrial Fast Ethernet Switch from the track.



Step 5: Lightly pull out the bottom of DIN rail to remove it from the track.

#### 3.4 Wall-mount Plate Mounting Installation

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

Step 1: Remove the DIN rail from the Industrial Fast Ethernet Switch; loosen the screws to remove the DIN rail.

- 11 -

Step 2: Place the wall-mount plate on the rear panel of

the Industrial Fast Ethernet Switch.



## www.PLANET.com.tw

PLANET Technology Corp. 11F., No. 96, Minguan Rd., Xindian Dist., New Taipei City 231, Taiwan 2350-AH0290-002



## **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 FAQ : http://www.planet.com.tw/en/support/faq.php?type=1

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

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

- Step 4: Use the hook holes at the corners of the wallmount plate to hang the Industrial Fast Ethernet Switch on the wall.
- Step 5: To remove the wall-mount plate, reverse the steps above.

Copyright © PLANET Technology Corp. 2016. Contents are subject to revision without prior notice. PLANET is a registered trademark of PLANET Technology Corp. All other trademarks belong to their respective owners.



#### User's Manual

# **Industrial Switch**

ISW-501T/ISW-801T

# 5-/8-Port Fast Ethernet Switch







#### EC Declaration of Conformity

For the following equipment

\*Type of Product: 5/8-Port 10/100Mbps Industrial Ethernet Switch \*Model Number: ISW-501T, ISW-801T

\* Produced by: nufacturer's Aaderss: Planet Technology Corp. nufacturer'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

Approximation of the Laws of the Member States relating to Licentoninguese on (2004/108/EC). For the evaluation regarding the EMC, the following standards were applied:

EN 55022 EN 61000-3-2 EN 61000-3-3 EN 55024 (Class A:2010/AC:2011) (Class A:2010/AC:2011) (2014) (2013) (2010) (2008) (2006+A1:2008+A2:2010) (2012) (2005) IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-5 IEC 61000-4-6 IEC 61000-4-8 (2005) (2013) (2009) (2004) IEC 61000-4-1 Responsible for marking this declaration if the Authorized repr tative 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 25 March, 2016 Taiwan Place

#### 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