

## Product Specification

5-Port 10/100/1000Mbps Industrial Gigabit Ethernet Switch

### IGS-501T

Version 3.0

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Change History:

Revision	Date	Author	Change List
Version 1.0	2008/12/26	Marc Liao	Initial Release
Version 2.0	2012/6/6	Marc Liao	Hardware Changed -Chip Replacement
Version 3.0	2014/9/12	Marc Liao	Hardware Changed -Chip Replacement from AR8328-AK1A to AR8328-BK1A

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## 1. PRODUCT DESCRIPTION

The PLANET IGS-501T is 5-Port 10/100/1000Mbps Industrial Gigabit Ethernet Switch with non-blocking wire-speed performance and slim type with IP 30 metal shape for easily deployment in Heavy Industrial demanding environments.

With a 10Gbps internal switching fabric, the IGS-501T Industrial Gigabit Ethernet Switch can handle extremely large amounts of data in a secure topology linking to a backbone or high capacity servers.

The IGS-501T Industrial Gigabit Ethernet Switch has 2K MAC Address table and offers wire-speed packets transfer performance without risk of packet loss. The Gigabit ports with 9K jumbo packet support can handle large amounts of data transmission in a secure topology linking to a backbone or high-power servers. The high data throughput of the device makes it ideal for most Gigabit environments.

All RJ45 copper interfaces support 10/100/1000Mbps Auto-Negotiation for optimal speed detection through RJ45 Category 6, 5 or 5e cables. Support standard for Auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables.

The Flow Control function allows IGS-501T Industrial Gigabit Ethernet Switch supported routers and Servers to directly connect to this device for fast, reliable data transfer.

## 2. PRODUCT FEATURES

### Physical Port

- 5-Port 10/100/1000Base-T RJ45 with auto MDI/MDI-X function

### Layer 2 Features

- Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T Ethernet standard
- Supports Auto-negotiation and 10/100Mbps half / full duplex and 1000Mbps full duplex mode
- High performance Store and Forward architecture, broadcast storm control, 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): 10Gbps
- Integrated address look-up engine, support 2K absolute MAC addresses
- 1M Bits on-chip buffer memory
- 9K Jumbo packet size support
- Automatic address learning and address aging
- CSMA/CD Protocol

### Industrial Case / Installation

- IP30 Metal case / Protection
- 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, AC 24V power support
- Supports EFT protection 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- 40 to 75 degrees C operation temperature



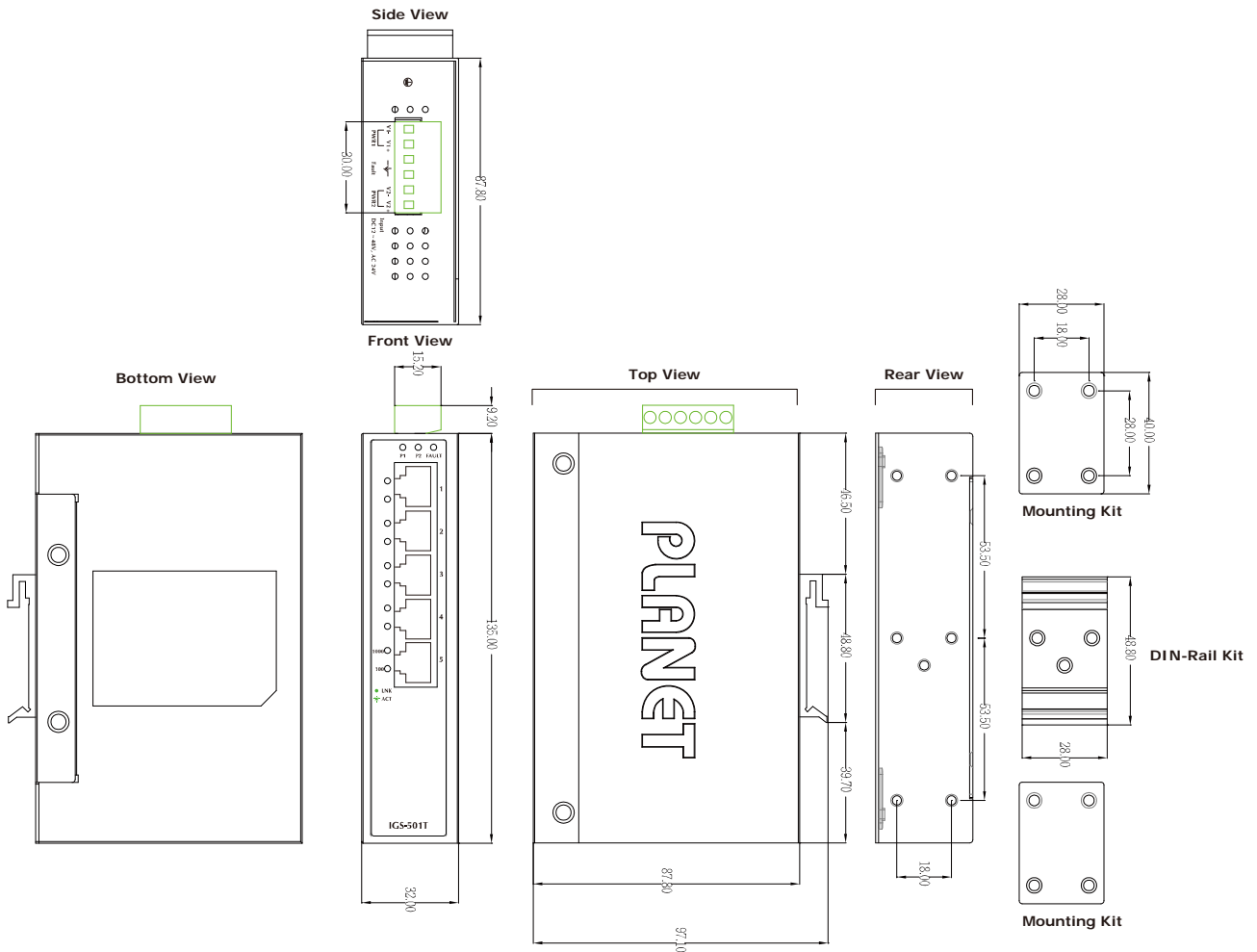
**3.3 PHYSICAL SPECIFICATIONS:**

**Dimensions:**

135mm x 87mm x 32mm (W x D x H)

**Weight:**

498g



*Dimensions ( unit = mm )*

## LED Definition

### System

LED	Color	Function
P1	Green	<b>Lit:</b> indicate the power 1 has power.
P2	Green	<b>Lit:</b> indicate the power 2 has power.
FAULT	Green	<b>Lit:</b> indicate the either power 1 or power 2 has no power.

### Per Gigabit Ethernet RJ45 Interface

LED	Color	Function
1000	Green	<b>Lit:</b> indicate the Switch is successfully connecting to the network at 1000Mbps. <b>Off:</b> indicate that the Switch is successfully connecting to the network at 10Mbps or 100Mbps. <b>Blink:</b> indicate that the Switch is actively sending or receiving data over that port.
100	Green	<b>Lit:</b> indicate the Switch is successfully connecting to the network at 100Mbps or 10Mbps. <b>Off:</b> indicate that the Switch is successfully connecting to the network at 1000Mbps. <b>Blink:</b> indicate that the Switch is actively sending or receiving data over that port.

## 3.4 ENVIRONMENTAL SPECIFICATION

### Operating:

**Temperature:** -40°C ~75 degrees C  
**Relative Humidity:** 5% ~ 95% (non-condensing)

### Storage:

**Temperature:** -40°C ~75 degrees C  
**Relative Humidity:** 5% ~ 95% (non-condensing)

### 3.5 ELECTRICAL SPECIFICATION

**Power Requirement:**

12~48 V DC, Redundant power with polarity reverse protection function, **AC 24V Power input**

**Power Consumption:**

Status	Input Voltage	Current (A)	Power Consumption ( Watts / BTU )
<b>Power ON</b>	DC 12V	0.12A	1.44W / 4.9BTU
	DC 24V	0.08A	1.92W / 6.5BTU
	DC 48V	0.04A	1.92W / 6.5BTU
	AC 24V	0.07A	4.8W / 16BTU
<b>Full Load (Port-1 to Port-5 Link Up)</b>	DC 12V	0.35A	4.2W / 14BTU
	DC 24V	0.18A	4.32W / 14BTU
	DC 48V	0.10A	4.8W / 16BTU
	AC 24V	0.10A	8.1W / 27BTU
<b>Full Load Operating (Port-1 to Port-5 packet send &amp; receive)</b>	DC 12V	0.35A	4.2W / 14BTU
	DC 24V	0.18A	4.32W / 14BTU
	DC 48V	0.10A	4.8W / 16BTU
	AC 24V	0.10A	8.3W / 28BTU

### 3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

**Stability Testing:**

- IEC60068-2-32 (Free fall)
- IEC60068-2-27 (Shock)
- IEC60068-2-6 (Vibration)

### 3.7 REALIABILITY

MTBF > 100,000Hrs

### 3.8 BASIC PACKAGING

- Industrial Gigabit Ethernet Switch x 1
- User's Manual x 1
- DIN Rail Kit x 1
- Wall Mount Kit x 1

### 3.9 PACKING DIMENSION

**Dimension:** 410mm (W) x 310mm (D) x 265mm (H)

**Weight:** 10.8kg (Gross weight)

20pcs in one carton