

Product Specification

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

IGS-501T

Version 1.0

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Change History:

Revision	Date	Author	Change List
Version 1.0	2008/12/26	Marc Liao	Initial release

Author	Marc Liao	Editor:	Marc Liao
Reviewed by:	Kent Kang	Approved by:	Tom Shih

1. PRODUCT DESCRIPTION

The PLANET IGS-501T is 5-Port 10/100/1000Mbps Industrial Gigabit Ethernet Switch with non-blocking wire-speed performance and new 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 8K 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 RJ-45 copper interfaces support 10/100/1000Mbps Auto-Negotiation for optimal speed detection through RJ-45 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 RJ-45 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 8K absolute MAC addresses
- 136 kilobytes on-chip frame buffer
- 9K Jumbo packet size support
- Automatic address learning and address aging
- CSMA/CD Protocol

Industrial Case / Installation

- IP-30 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
- Supports EFT protection 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- 40 to 75 Degree C operation temperature

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

Switch ASIC: VITESSE VSC7395-03 X1

3.2 FUNCTION SPECIFICATION

Model	IGS-501T
Hardware Specification	
10/100/1000Base-T Ports	5
Installation	DIN rail kit and wall mount ear
Switch Specification	
Switch Processing Scheme	Store-and-Forward
Address Table	8K entries
Buffer	136 kilobytes
Flow Control	Back pressure for half duplex, IEEE 802.3x Pause Frame for full duplex
Switch fabric	10Gbps
Throughput (packet per second)	7.4Mpps
Jumbo Frame	9K
Network cables	10/100/1000Base-T: Cat. 3, 4, 5, 5e, 6 UTP cable (100meters, max.) EIA/TIA-568 100-ohm STP (100meters, max.)
Standards Conformance	
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3x Full-duplex flow control
Stability testing	IEC60068-2-32(Free fall), IEC60068-2-27(Shock), IEC60068-2-6(Vibration)

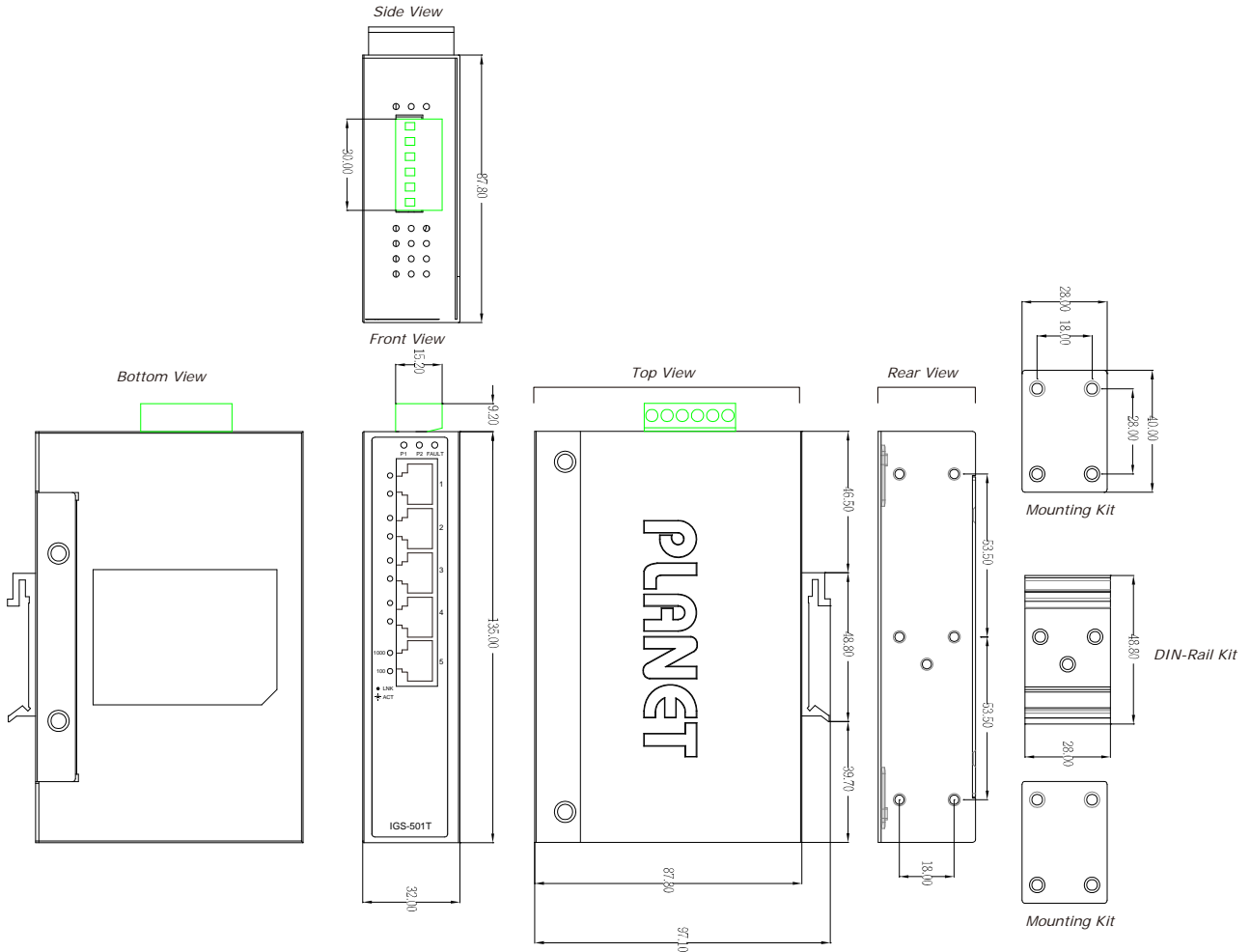
3.3 PHYSICAL SPECIFICATIONS:

Dimensions:

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

Weight:

455g



Dimensions (unit = mm)

LED definition

LED	Color	Function
P1	Green	Lit: indicate the power 1 has power.
P2	Green	Lit: indicate the power 2 has power.
FAULT	Green	Lit: indicate the either power 1 or power 2 has no power.
1000	Green	Lit: indicate the Switch is successfully connecting to the network at 1000Mbps. Off: indicate that the Switch is successfully connecting to the network at 10Mbps or 100Mbps. Blink: indicate that the Switch is actively sending or receiving data over that port.
100	Green	Lit: indicate the Switch is successfully connecting to the network at 100Mbps. Off: indicate that the Switch is successfully connecting to the network at 10Mbps or 1000Mbps. Blink: indicate that the Switch is actively sending or receiving data over that port.

3.4 ENVIRONMENTAL SPECIFICATION

Operating:

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

Storage:

Temperature: -40°C ~85 Degree C
Relative Humidity: 5% ~ 95% (non-condensing)

3.5 ELECTRICAL SPECIFICATION

Power requirement: 12~48 VDC, Redundant power with polarity reverse protection function **PD Input Voltage:** 48V DC

Power Consumption: 11.9 Watts / 40BTU

3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

3.7 REALIABILITY

MTBF > 50,000 hrs @ 25 degree C

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 (Goss weight)
18pcs in one carton