



Compact Industrial 5-Port 10/100/1000T Gigabit Ethernet Switch



Compact Size for More Practicability and Convenience

PLANET IGS-500T Compact Industrial 5-Port 10/100/1000T Gigabit Ethernet Switch, suitable for industrial use, features 5 1000Mbps autonegotiation ports, IP30-rated rugged but compact case and a wide-ranging redundant power system (12~48V DC or 24V AC). The IGS-500T is able to operate in any harsh environment with operating temperature ranging from -40 to 75 degrees C.



Compact Industrial 5-Port Switch

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
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- High-performance Store and Forward architecture, broadcast storm control and runt/CRC filtering eliminate erroneous packets to optimize the network bandwidth
- Backplane (switching fabric): 10Gbps
- Integrated address look-up engine, supporting 4K absolute MAC addresses
- · 9K jumbo packet size
- · Automatic address learning and address aging
- CSMA/CD Protocol

Industrial Case and 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
- Supports 6000 VDC Ethernet ESD protection
- · -40 to 75 degrees C operating temperature
- · Free fall, shock-proof and vibration-proof for industries



As the trend for an IIoT (Industrial Internet of Things) infrastructure is gradually in demand, the IGS-500T is especially designed to make the deployment of an industrial network easy as it comes with a Plug and Play feature. Besides, it is stable and reliable when it comes to fast data and power transmission.

Low Power Consumption for Green Networking

The IGS-500T, adopting the advanced green networking technology, provides the link-on cable length power saving and link-down power saving methods. These features make the IGS-500T consume very low power in full load operation mode, which helps conserve energy effectively but maintains high performance efficiently.

With the Auto Power Saving and IEEE 802.3az Energy Efficient Ethernet (EEE) Protocol, the IGS-500T can automatically detect cable link status and network traffic, and thus is able to adjust power consumption accordingly. It enables the switch to consume less power when it is less active.

Dual Power Input for High Availability Network System

The IGS-500T features a strong dual power input system with wide-ranging voltages (12V~48V DC or 24V AC) incorporated into customer's automation network to enhance system reliability and uptime. In the example below, when power supply 1 fails to work, the hardware failover function will be activated automatically to keep powering the IGS-500T via power supply 2 alternatively without any loss of operation.

Non-stop Ethernet Server **Dual Power Input with Auto Failover**





1000BASE-T UTP

High Switch Performance

The IGS-500T offers a high-performance switch architecture. With the 5 10/100/1000Mbps Gigabit Ethernet ports providing non-blocking switch fabric and wire-speed throughput as high as 10Gbps and the 4K MAC address table, the IGS-500T can perform wire-speed packet transfer without the risk of packet loss. The flow control function enables the IGS-500T to provide fast and reliable data transfer.

Plug and Play

All of the RJ45 copper interfaces in the IGS-500T support 10/100/1000Mbps auto negotiation for optimal speed detection through RJ45 Category 6, 5 or 5e cables. The standard auto-MDI/MDI-X support can detect the type of connection to any Ethernet device without requiring special straightthrough or crossover cables.



Application

Designed for Heavy Industries

The IGS-500T's IP30-rated metal case is particularly designed for heavy industries, such as factories, harbors, warehouses, and more. When installed at these establishments, it can enhance the work performance of these establishments by speedily transferring incoming and outgoing data.





Specifications

Model	IGS-500T
Hardware Specifications	
Hardware Version	4
Copper Ports	5 x 10/100/1000BASET 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 Fault 2 x LED for each copper port Green: 1000Mbps LNK/ACT Orange: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	3.6 watts/12.35BTU
Installation	DIN-rail kit and wall-mount ear
Enclosure	IP30 metal case
Dimensions (W x D x H)	70 x 104 x 30 mm
Weight	252g
Switch Specifications	2029
Switch Processing Scheme	Store-and-Forward
Address Table	4K entries
Buffer Memory	1M bits on-chip buffer memory
Flow Control	Back pressure for half duplex
	IEEE 802.3x pause frame for full duplex
Switch Fabric	10Gbps
Throughput (packet per second)	7.4Mpps@64bytes
Jumbo Frame	9K
Network Cables	10/100/1000BASE-T 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 802.3ab Gigabit Ethernet IEEE 802.3x Full-Duplex Flow Control IEEE 802.3az Energy Efficient Ethernet IEEE 802.1p Class of Service
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)
Environment	
Temperature	Operating: -40~75 degrees C Storage: -40~75 degrees C
Humidity	Operating: 5~90%, Storage: 5~90% (non-condensing)



Diagram



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Bottom View



Dimensions (unit = mm)

Ordering Information

IGS-501T

5-port 10/100/1000T Industrial Gigabit Ethernet Switch (-40~75 degrees C operating temperature)

Related Products

IGS-501T	5-Port 10/100/1000T Industrial Gigabit Ethernet Switch (-40~75 degrees C operating temperature)
IGS-801T	8-Port 10/100/1000T Industrial Gigabit Ethernet Switch (-40~75 degrees C operating temperature)
IGS-1020TF	Industrial 8-Port 10/100/1000T + 2-Port 1000X SFP Ethernet Switch (-40~75 degrees C operating temperature)
ISW-800T	Compact Industrial 8-Port 10/100TX Ethernet Switch (-40~75 degrees C operating temperature)
ISW-501T	Industrial 5-Port 10/100TX Fast Ethernet Switch (-40~75 degrees C operating temperature)
ISW-801T	Industrial 8-Port 10/100TX Fast Ethernet Switch (-40~75 degrees C operating temperature)

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IGS-500T

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