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

New slim type with more practicability and convenience

After entering the Industrial Ethernet market with popular ISW / IFT series Fast Ethernet Switch / Converter products, PLANET now releases the advanced industrial hardened Gigabit Ethernet Switch series with new slim type, IP-30 metal case. The compact, IP-30 standard metal case allows either DIN rail or wall mounting for efficient use of cabinet space. The IGS-801, one of the new series model, equips with 8 10/100/1000Mbps auto negotiation ports and operates reliably in Heavy Industrial demanding environments.

Stable performance under difficult environments

The IGS-801 provides a high level of immunity against electromagnetic interference and heavy electrical surges which are usually found on plant floors or in curb side traffic control cabinets. Being able to operate under the temperature range from -10 to 60 Degree C coupled with hazardous location certification (Class 1 Division 2), the IGS-801 can be placed in almost any difficult environment. The IGS-801 also possesses an integrated power supply source with wide range of voltages (12 to 48V DC) for worldwide high availability applications requiring dual or backup power inputs.

Robust Switch performance

The IGS-801 offers high performance switch architecture. With the 8 10/100/1000Mbps Gigabit Ethernet ports providing non-blocking switch fabric and wire-speed throughput as high as 16Gbps and the 8K MAC Address table, the IGS-801 can perform wire-speed packets transfer without risk of packet loss.

The flow control function enables the IGS-801 to provide fast and reliable data transfer. The Gigabit port with 9K Jumbo frame supported can handle extremely large amounts of data transmission in industrial topology that forward data to central control room.

All of the RJ-45 copper interfaces in the IGS-801 support 10/100/1000Mbps Auto-Negotiation for optimal speed detection through RJ-45 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 straight or crossover cables.

Key Features

PHYSICAL PORT

- 8-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): 16Gbps
- Integrated address look-up engine, support 8K absolute MAC addresses
- 176 kilobytes on-chip frame buffer
- 9K Jumbo packet size support
- Automatic address learning and address aging
- CSMA/CD Protocol

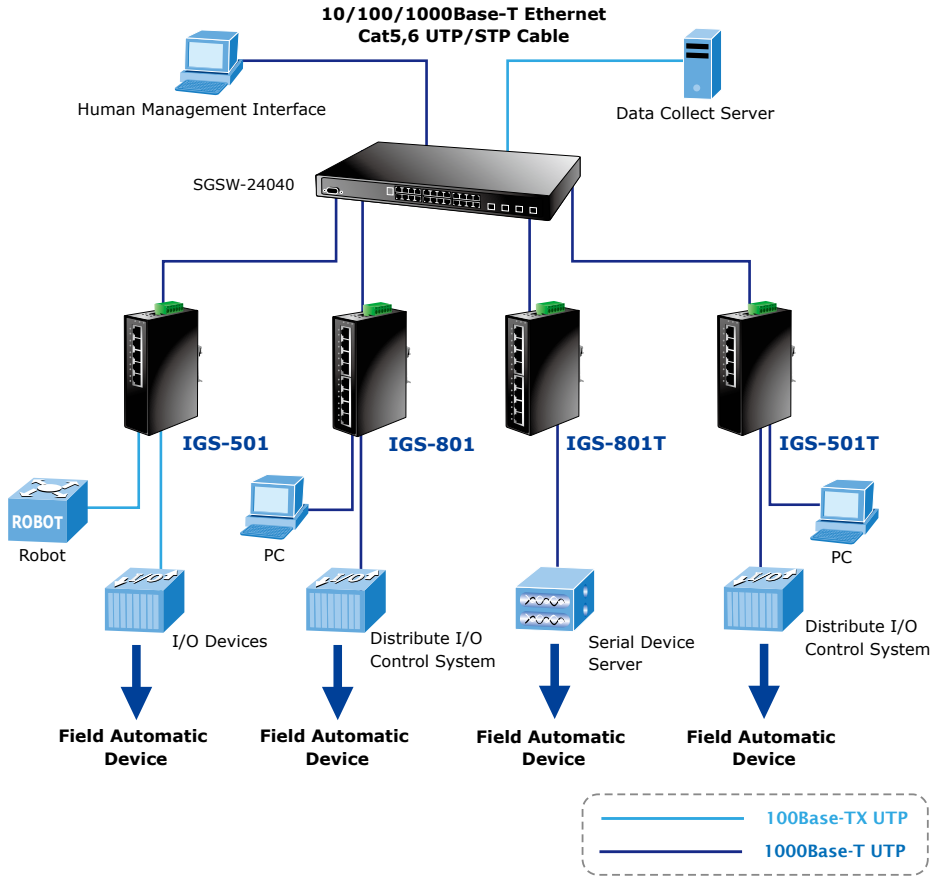
INDUSTRIAL CASE / INSTALLATION

- 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
- -10 to 60 Degree C operation temperature

Applications

Industrial area Switch for data collection and forwarding

The IGS-801 equips with 8 10/100/1000Mbps ports that offers auto MDI / MDIX feature, 16Gbps non-blocking switch fabric and the 8K MAC Address table so that it can perform wire-speed packets transfer without risk of packet loss. The Gigabit ports supporting 9K jumbo packet can handle large amounts of data transmission in a secure topology linking to a backbone Switch or high-power servers. The IGS-801 with the slim type IP 30 metal shape is ideal for most Heavy Industrial demanding environments.



SPECIFICATION

Product	8-Port 10/100/1000Mbps Industrial Gigabit Ethernet Switch
Model	IGS-801
Hardware Specification	
10/100/1000Base-T Ports	8
Dimension (W x D x H)	135 x 87 x 32 mm
Weight	473g
Power Requirement	12~48 VDC, Redundant power with polarity reverse protection function
Power Consumption / Dissipation	13.2 Watts / 45BTU
Installation	DIN rail kit and wall mount ear
Alarm	Provides one relay output for power fail Alarm Relay current carry ability: 1A @ DC 24V
Switch Specification	
Switch Processing Scheme	Store-and-Forward
Address Table	8K entries
Buffer	176 kilobytes
Flow Control	Back pressure for half duplex, IEEE 802.3x Pause Frame for full duplex
Switch fabric	16Gbps
Throughput (packet per second)	11.9Mpps
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
Temperature	Operating: -10~60 Degree C Storage: -10~60 Degree C
Humidity	Operating: 5~90%, Storage: 5~90% (Non-condensing)
Regulation Compliance	FCC Part 15 Class A, CE
Stability testing	IEC60068-2-32(Free fall), IEC60068-2-27(Shock), IEC60068-2-6(Vibration)

ORDERING INFORMATION

IGS-801	8-Port 10/100/1000Mbps Industrial Gigabit Ethernet Switch (-10~60 Degree C operate temperature)

RELATED PRODUCTS

IGS-501	5-Port 10/100/1000Mbps Industrial Gigabit Ethernet Switch (-10~60 Degree C operate temperature)
IGS-501T	5-Port 10/100/1000Mbps Industrial Gigabit Ethernet Switch (-40~75 Degree C operate temperature)
IGS-801T	8-Port 10/100/1000Mbps Industrial Gigabit Ethernet Switch (-40~75 Degree C operate temperature)
IGT-902	10/100/1000Base-T to 1000Base-SX Industrial Managed Media Converter (-10~60 Degree C operate temperature)
IGT-902S	10/100/1000Base-T to 1000Base-LX Industrial Managed Media Converter (-10~60 Degree C operate temperature)
IGT-905A	10/100/1000Base-T to mini-GBIC Industrial Managed Media Converter (LC,MM/SM)-distance depend on SFP module (-10~60 Degree C operate temperature)

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