Industrial 10/100TX Fast Ethernet Switch

Physical Port

- 5-/8-port 10/100BASE-TX RJ45 with auto-MDI/MDI-X function (ISW-500T/ISW-800T/ISW-501T/ISW-801T)
- **4** 10/100BASE-TX Fast Ethernet **IEEE 802.3at PoE+** RJ45 copper ports (Ports 1 to 4)/1 10/100BASE-TX Fast Ethernet non-PoE RJ45 copper port (ISW-504PT)
- **4** 10/100BASE-TX Fast Ethernet IEEE **802.3at PoE+** RJ45 copper ports (Ports 1 to 4)/1 100BASE-FX SFP interface(ISW-514PTF)
- 8-port 10/100BASE-TX with dustproof M12 connectors and IEEE 802.3at PoE+ injector function (ISW-808PT-M12A)
- 8-port 10/100BASE-TX with waterproof/dustproof M12 connectors and IEEE 802.3at PoE+ injector function (ISW-808PT-M12)

Power over Ethernet (ISW-504PT/ISW-514PTF/ISW-808PT-M12/ISW-808PT-M12A)
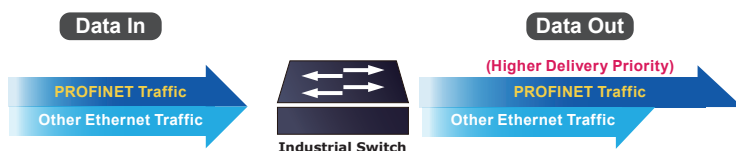
- Its end-span PSE complies with IEEE 802.3at Power over Ethernet Plus.
- Backward compatible with IEEE 802.3af Power over Ethernet
- Up to 4/8 ports of IEEE 802.3af/802.3at devices powered
- 120-/180-watt PoE budget **(ISW-504PT_ISW-514PTF/ISW-808PT-M12_ISW-808PT-M12A)**
- Supports PoE power up to 36 watts for each PoE port
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters

Multi Fast Ethernet TP/SFP Interfaces Solution for Hardened Environment

PLANET ISW Industrial 10/100TX Fast Ethernet Switch Series is tailored for industrial applications, featuring multi-fast Ethernet TP/SFP interfaces, rugged yet compact case, and a versatile redundant power system. The ISW Series comes with an operating **temperature range** of **-40** to **75 degrees** Celsius.

In response to the growing demand for IIoT (Industrial Internet of Things) infrastructure, the ISW Series is designed for easy deployment of industrial networks with its Plug and Play capability. Furthermore, it ensures stable and reliable fast data and power transmission. The ISW Series also supports PROFINET traffic pass-through with QoS, making it an ideal choice for integrating with industrial automation systems and enhancing communication between devices in a factory setting.

Layer 2 Features

- 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
- PROFINET traffic pass-through with QoS
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- Backplane (switching fabric): 1Gbps/1.6Gbps
- Integrated address look-up engine, supporting 1K/2K absolute MAC addresses

Models	10/100 Copper Ports	IEEE 802.3at PoE+ Ports	100FX SFP Slot	Switch Capacity	Enclosure	Switch Capacity
ISW-500T	RJ45 x 5	8	--	1Gbps	IP30 metal case	12~48V DC & 24V AC
ISW-800T	RJ45 x 8	--	--	1.6Gbps		
ISW-501T	RJ45 x 5	--	--	1Gbps		
ISW-801T	RJ45 x 8	4	--	1.6Gbps		
ISW-504PT	RJ45 x 5	--	--	1Gbps	IP40 metal case	12~54V DC
ISW-514PTF	RJ45 x 4	--	1	1Gbps		
ISW-808PTM12	M12 x 8	--	--	1.6Gbps	IP67 aluminum case	
ISW-808PTM12A	M12 x 8	--	--	1.6Gbps	IP50 metal case	

PROFINET Traffic Pass-through with QoS

The ISW Series features a brand-new function that enhances support for recognizing the PROFINET traffic for higher delivery priority. Once it receives the

PROFINET traffic, it will prioritize forwarding the PROFINET traffic first before handling other Ethernet traffic. With this enhanced function, the ISW Series will become the ideal Industrial Unmanaged Switch for handling faster PROFINET traffic.

PLANET PROFINET Protocol Pass-through Industrial Switch

Data In

Data Out

(Higher Delivery Priority)

PROFINET Traffic

Other Ethernet Traffic

PROFINET Traffic

Other Ethernet Traffic

Industrial Switch

Robust Protection

The ISW Series provides contact discharge and air discharge for Ethernet ESD protection. It also supports surge immunity to improve product stability and protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.

- Automatic address learning and address aging
- CSMA/CD Protocol

Industrial Case and Installation
- IP30/IP40/IP50/IP67 metal/aluminum case
- Waterproof and dustproof, and fanless designs
- DIN-rail and wall-mount installation
- Redundant power design
  - 12 to 48/54V DC, redundant power with reverse polarity protection
  - Active-active redundant power failure protection
  - Backup of catastrophic power failure on one supply
  - Fault tolerance and resilience
- Supports 6KV DC Ethernet ESD protection
- Supports 6KV surge protection
- -40 to 75 degrees C operating temperature

High Switch Performance

The ISW Series offers a high-performance switch architecture. With the 5/8 10/100Mbps Fast Ethernet ports providing non-blocking switch fabric and wire-speed throughput and the MAC address table, the ISW Series can perform wire-speed packet transfer without the risk of packet loss. The flow control function enables it to provide fast and reliable data transfer.

Plug and Play

All of the RJ45 copper interfaces in the ISW Series support 10/100Mbps auto negotiation for optimal speed detection through RJ45 Category 5, 5e, 6, 6a or 7 cables. The standard auto-MDI/MDI-X support can detect the type of connection to any Ethernet device without requiring special straight-through or crossover cables.

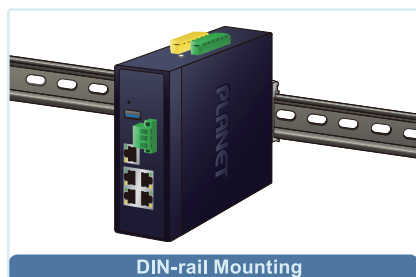*Flexible and Easy Installation with Limited Space*

The compact-sized ISW Series is specially designed to be installed in a narrow environment, such as wall enclosure. It can be installed by fixed wall mounting or DIN rail, thereby making its usability more flexible and easier in any space-limited location.

Optional installation method
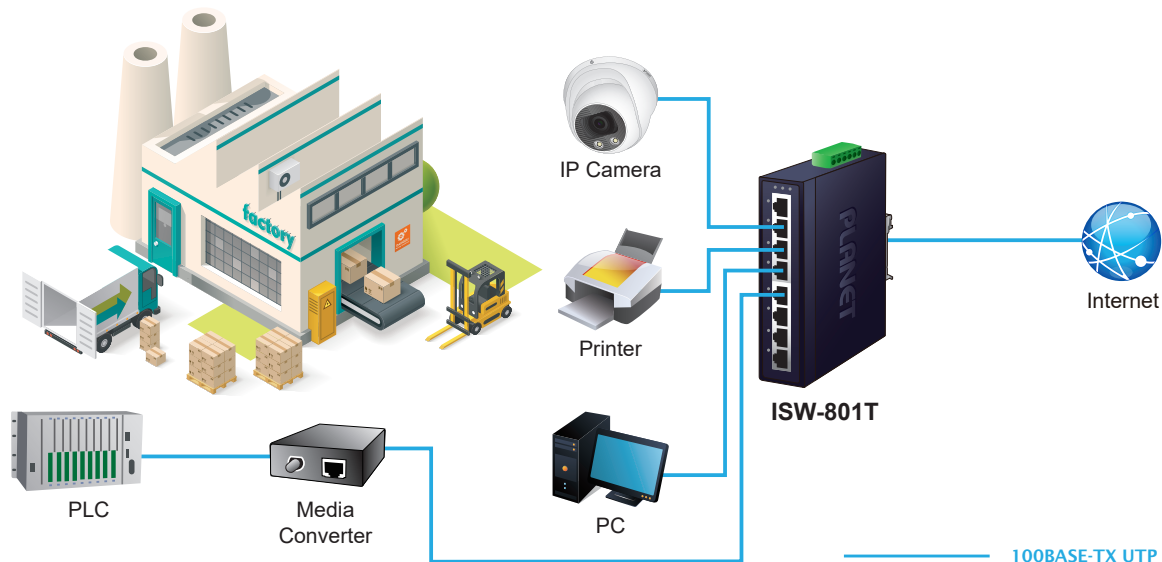
DIN-rail Mounting

Wall Mounting

Side Wall Mounting (Space saving)

* The above pictures are for illustration only.

Applications

Designed for Heavy Industries

The ISW Series 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.

Industrial-grade PoE+ Switch for Building Automation and Security

Suitable for buildings where security is strictly enforced, the ISW-504PT and ISW-514PTF, with four Fast Ethernet 802.3at PoE+ in-line power interfaces, can easily build a power centrally controlled for an IP phone system, IP surveillance system, and wireless AP group in the harsh Industrial environment. For instance, 4 PoE IP cameras or PoE wireless APs can be easily installed for surveillance demands or a wireless roaming environment in the industrial area can be built. Without the power-socket limitation, the ISW-504PT and ISW-514PTF makes the installation of IP cameras or wireless APs easier and more efficient.