Industrial Ethernet Innovative Industrial PoE Solution

Harsh

-40°C**~75°C**



Weather-proof Design
 Redundant Power System

PLANET PoE PSE Application



Up to

30.8 Watts

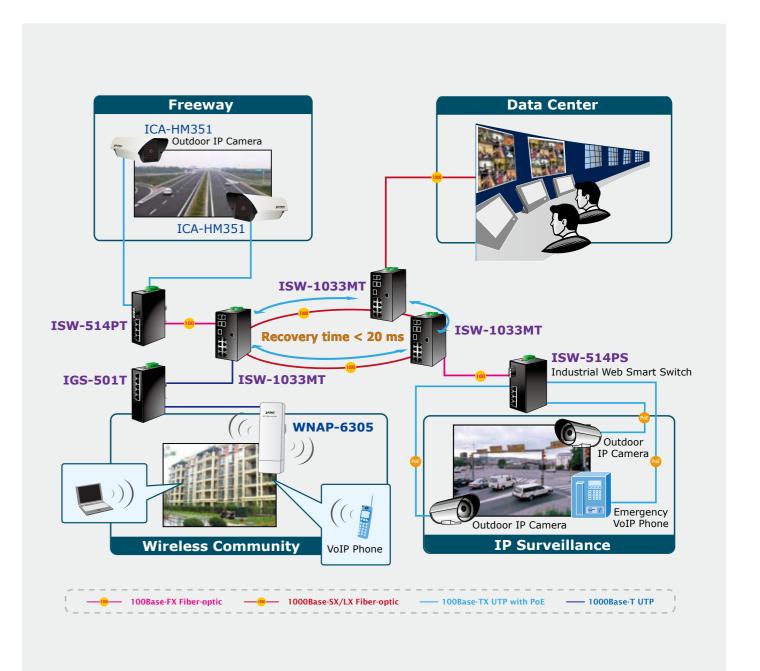






Industrial Grade Data and Serial over Ethernet Communication

The PLANET Industrial Ethernet Switches are industrially hardened. Ethernet switch specifically designed to operate reliably in electrically harsh and climatically demanding environments. The Managed Industrial Switch series incorporates Redundant Data Ring technology and redundant power supply system into customers' industrial automation network to enhance system reliability and uptime in the factory harsh environments. It protects customer's industrial network connectivity with switching recovery capability. They provide IP30 aluminum case and 100Base-FX ports or Gigabit TP/SFP combo interfaces for long distance uplink. The Gigabit fiber optical uplink capability can guarantee the throughput to all nodes hooked into the network and distance can be extended up to above 120 kilometers with SFP module.



Coaxial Extender

Wireless AP

Fiber Switch

M12 Switch

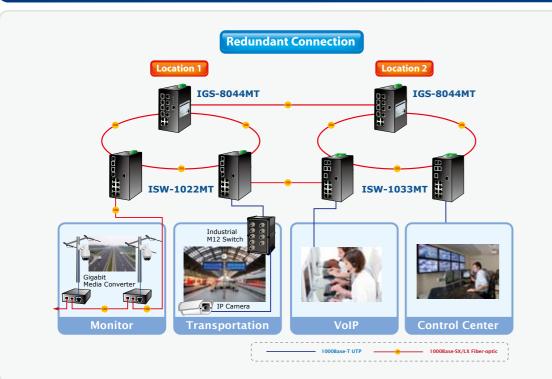
Layer 2 Industrial Full Gigabit Managed Switches

The PLANET Industrial Ethernet Switches are industrially hardened. Ethernet switches are specially designed to operate reliably in electrically harsh and climatically demanding environment. The PLANET Layer2 Industrial Managed Switch with model name starting IGS or IGSW including pure managed Switches, un-managed Switches, PoE Switches are all supported full Gigabit port. The capital 'T' means that it can support and operate under WIDE-TEMPERATURE environment ranging from -40 up to 75 Degree C.

The switching performance features IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) used for implementing fault tolerant ring and mesh network architectures. The management function provides improve system reliability and advanced networking features to make it suited ideally for creating Ethernet networks for mission-critical, real-time and control application.



Coupling Ring - Connection redundant with different area applications



Layer 2 Industrial Gigabit Managed Switches

The PLANET Industrial Ethernet Switches are industrially hardened. Ethernet switches are specially designed to operate reliably in electrically harsh and climatically demanding environment. The PLANET Layer2 Industrial Managed Switch with model name starting ISW, including pure managed Switches, unmanaged Switches, PoE Switches are all equipped Fast TP/SFP port and Gigabit TP/SFP combo mixed designing. The capital 'T' means that it can support and operate under WIDE-TEMPERATURE environment ranging from -40 up to 75 Degree C.

The Layer2 Industrial Managed Switch series incorporate redundant power supply system into customer's industrial automation network to enhance system reliability and uptime in the factory harsh environments. It protects customer's industrial network connectivity with power redundant ability. They provide IP30 aluminum case and 100Base-FX port or Gigabit TP/SFP SFP combo interfaces for long distance uplink. The Gigabit fiber optical uplink capability can guarantee the throughput to all nodes hooked into the network and distance can be extended up to above 120 kilometers with SFP module.

ISW-1022MT

ISW-1033MT

- 8-Port 10/100Base-TX Copper
 2-Port Gigabit TP/SFP combo port
 2 SFP Slot compatible with 100/1000Base-SX/LX



• 7-Port 10/100Base-TX Copper

- 3-Port Gigabit TP/SFP combo port • 3 SFP Slot compatible with
 - 100/1000Base-SX/LX Ring Supported

Layer 2 Industrial Full Gigabit Switches







Layer 2 Industrial Fast Ethernet Switches

After PLANET ISW series Fast Ethernet Switch products being popular, PLANET now releases the advanced industrial hardened Fast Ethernet Switch series with slim type, IP30 metal case. The compact, IP30 standard metal case allows either DIN rail or wall mounting for efficient use of cabinet space. The capital 'T' means that it can support and operate under WIDE-TEMPERATURE environment ranging from -40 up to 75 Degree C.

The Layer2 Industrial Switch series incorporates redundant power supply system into customer's industrial automation network to enhance system reliability and uptime in the factory harsh environments. It protects customer's industrial network connectivity with power redundant ability. They provide IP30 aluminum case and 100Base-FX port or Gigabit TP/SFP SFP combo interfaces for long distance uplink.



Layer 2 Industrial Managed PoE Switches

The PLANET industrial PoE switch series in-line power follows standard IEEE 802.3af or IEEE 802.3at and able to give power to PoE compliant devices at the distance up to 100 meters through the 4-pair CAT5 / 5e UTP wire. With Data and Power over Ethernet from one unit, the industrial PoE series shall reduce cables deployment and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power lowers the installation costs, simplifies the installation effort and eliminates the need for electricians or extension cords.

IGS-10020HPT

- 2-Port 100/1000Base-X SFFIEEE 802.1w RSTP supported
- Support IEEE 802.3at PoE standard

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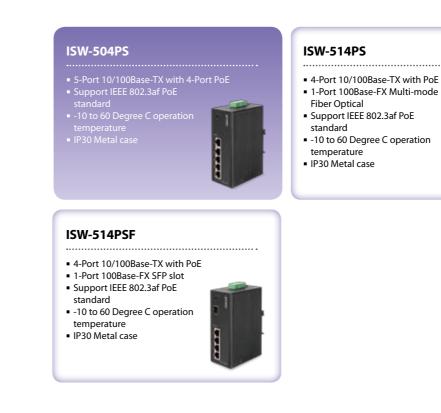
ISW-1022MPT

- 8-Port 10/100Base-TX with PoE
 - 2-Port 100/1000Base-X TP/SFP combo
 - Support IEEE 802.3af PoE standard
 - -40 to 75 Degree C wide operation temperature
 - IP30 Metal case



Layer 2 Industrial PoE Lite Managed Switches

The PLANET industrial PoE switch series in-line power follows standard IEEE 802.3af and able to give power to PoE compliant devices at the distance up to 100 meters through the 4-pair CAT5 / 5e UTP wire. With Data and Power over Ethernet from one unit, the industrial PoE series shall reduce cables deployment and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power lowers the installation costs, simplifies the installation effort and eliminates the need for electricians or extension cords.



Industrial PoE Media Converter

The PLANET industrial PoE media converter series in-line power follows standard IEEE 802.3af / IEEE 802.3at and able to give power to PoE compliant devices at the distance up to 100 meters through the 4-pair CAT5 / 5e UTP wire. With Data and Power over Ethernet from one unit, the industrial PoE series shall reduce cables deployment and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power lowers the installation costs, simplifies the installation effort and eliminates the need for electricians or extension cords.

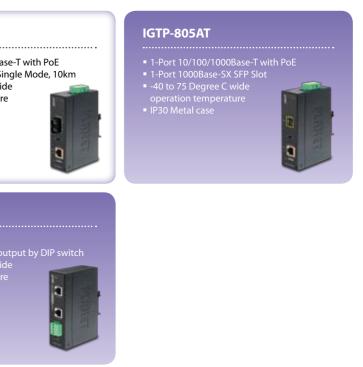
IGTP-802TS IGTP-802T 1-Port 10/100/1000Base-T with PoE 1-Port 1000Base-SX Multi-mode, 220 / 550 I-Port 10/100/1000Base-T with PoE I-Port 1000Base-SX Single Mode, 10km -40 to 75 Degree C wide operation temperature IP30 Metal case IPOE-162S **IPOE-162** 10/100/1000Base-T 12V / 24V DC Power output by DIP switch -40 to 75 Degree C wide Distance uo to 100m with 30W power output -40 to 75 Degree C wide operation temperature P30 Metal case IP30 Metal case



ISW-514PS15

- 4-Port 10/100Base-TX with PoE 1-Port 100Base-FX Single Mode
- Fiber Optical, 15km Support IEEE 802 3af Po





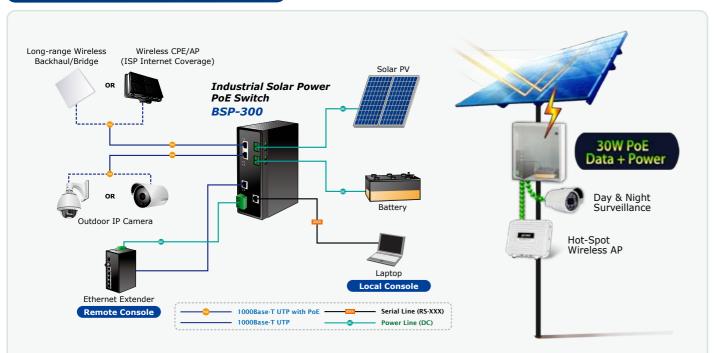
Layer 2 Industrial PoE Switches

The PLANET industrial PoE switch series in-line power follows standard IEEE 802.3af and able to give power to PoE compliant devices at the distance up to 100 meters through the 4-pair CAT5 / 5e UTP wire.

As un-management industrial PoE switch offers very easy to use Power over Ethernet function, customer just need connect their PoE device to unmanagement industrial PoE switch and nothing to worry about, just plug and play.



Solar Power System



Industrial RS232/RS485/RS422 over Ethernet Media Converter

In the industrial networking environments each networked device is required run continuously in the hazardous status. If industrial equipment stops the connection to the network, it might influence the entire operation of industrial systems and cause incredible financial losses.

The PLANET Industrial Media Converter Solution is designed with strong casing with high endurance of extreme temperatures in harsh industrial conditions. It also provides the dynamic status report and real-time alarm messages that it easier to monitor and manage the entire industrial networks. The PLANET Layer2 Industrial Managed Switch with model name starting ICS series product is means the signal converts between RS232/485/422 interface and Ethernet port or Fiber Optical port.

ICS-2100	ICS-2102
 1-Port 10/100Base-TX Ethernet 1 RS232 with DB9 interface 1 RS485 or RS422 with terminal block interface AC 24V or DC 12V to 48V Power redundant power input interface -10 to 60 Degree C operation temperature IP30 Metal case 	 1-Port 100Base-FX SC 1 RS232 with DB9 inte 1 RS485 or RS422 with AC 24V or DC 12V to 4 power input interface -10 to 60 Degree C op temperature IP30 Metal case
ICS-2105A	
1 Port 100Base-FX SFP Fiber Optical slot 1 RS232 with DB9 interface 1 RS485 or RS422 with terminal block interface AC 24V or DC 12V to 48V Power redundant power input interface	

Industrial Fiber over Fast Ethernet Media Converter

In the industrial networking environments each networked device is required run continuously in the hazardous status. If industrial equipment stops the connection to the network, it might influence the entire operation of industrial systems and cause incredible financial losses.

The PLANET Industrial Media Converter Solution is designed with strong casing with high endurance of extreme temperatures in harsh industrial conditions. It also provides the dynamic status report and real-time alarm messages that it easier to monitor and manage the entire industrial networks. The PLANET Layer2 Industrial Managed Switch with model name starting IFT series product is means the signal converts between Fiber Optical interface and Fast Ethernet port.

IFT-802T	IFT-802TS15
 1-Port 100Base-FX SC multi-mode, 2km	 1-Port 100Base-FX SC
Fiber Optical 1-Port 10/100Base-TX Ethernet DC 12V to 48V Power	Fiber Optical 1-Port 10/100Base-TX DC 12V to 48V Power
redundant power input	redundant power inpu
interface -40 to 75 Degree C wide	interface -40 to 75 Degree C wid
operation temperature IP30 Metal case	operation temperature IP30 Metal case



ICS-2102S15

- 1-Port 100Base-FX SC, 15km Fiber Optical
- 1 RS232 with DB9 interface
 1 RS485 or RS422 with terminal block interface
 AC 24V or DC 12V to 48V Power redundant
- -10 to 60 Degree C operatio
- P30 Metal case







Industrial Gigabit Fiber over Ethernet Managed Media Converter

In the industrial networking environments each networked device is required run continuously in the hazardous status. If industrial equipment stops the connection to the network, it might influence the entire operation of industrial systems and cause incredible financial losses.

The PLANET Industrial Media Converter Solution is designed with strong casing with high endurance of extreme temperatures in harsh industrial conditions. It also provides the dynamic status report and real-time alarm messages that it easier to monitor and manage the entire industrial networks. The PLANET Layer2 Industrial Managed Switch with model name starting IGT series product means the signal converts between Fiber Optical interface and Gigabit Ethernet port.

IGT-902	IGT-902S	IGT-905A
 1-Port 1000Base-SX SC Multi-mode, 2km Fiber Optical 1-Port 10/100/1000Base-T Ethernet DC 12V to 48V Power redundant power input interface -30 to 75 Degree C operation temperature IP30 Metal case 	 1-Port 1000Base-SX SC Single mode, 10km Fiber Optical 1-Port 10/100/1000Base-T Ethernet DC 12V to 48V Power redundant power input interface -30 to 75 Degree C operation temperature IP30 Metal case 	 1-Port 1000Base 1-Port 10/100/11 DC 12V to 48V P interface -30 to 75 Degree temperature IP30 Metal case
IGT-902T	IGT-902TS	
 1-Port 1000Base-SX SC Multi-mode, 2km Fiber Optical 1-Port 10/100/1000Base-T Ethernet 	 I-Port 1000Base-SX SC Single mode, 10km Fiber Optical I-Port 10/100/1000Base-T Ethernet 	

DC 12V to 48V Power redundant power

Industrial Wireless Access Point

For robust Wireless accessing, the PLANET IAP-200x series Access Point shall brings the new choice. The IAP-200x series comes with Industrial grade 802.11n Wireless interface for up to 300Mbps wireless performance that adopt the 802.11n MIMO technology not only 5 times the performance of 802.11g yet provides 3 times the wireless coverage. Being an industrial grade Wireless Access Point, the IAP-200x series make the Wireless connection not just in a comfort environment.

The IAP-200x series Access Points supporting multiple operating modes from Access Point, AP Client, Bridge and WDS bridge, IAP-200x make the wireless connect as any demands.

With 4 10/100Mbps Fast Ethernet Interface, and one additional 100Base-FX fiber-optical interface, the IAP-200x should provide plug and play and reliable data link for long distance connectivity. And what's more is the PoE (Power over Ethernet) capability. The Access Point, model IAP-200xPS also built-in 4 IEEE 802.3af PSE (Power Source Equipment) that help to drive up to 4 PoE IP camera, IP Telephony for applications like traffic monitoring, factory VoIP communication

IAP-2000PE

- 300Mbps 2 x5dBi Detachable

DC 12V to 48V Power redundant

power input interface -40 to 75 Degree C wide operation temperature

IP30 Metal case

- Omni-directional Antenna IPv4 / IPv6 WEB
- -10 to 60 Degree

IAP-2000PS

Complies with IEEE 802.11n, WLAN speed

- 300Mbps 4-Port 10/100Base-TX with
- IEEE 802.3af PoE 2 x5dBi Detachable
- **Omni-directional Antenna**
- IPv4 / IPv6 WEB
- management
- -10 to 60 Degree C
- operation temperature
- IP30 Metal case

IAP-2001PE

- Complies with IEEE 802.11n, WLAN speed 2 x5dBi Detachable Omni-directional Antenna • 1-Port 100Base-FX SFP slot • IPv4 / IPv6 WEB -10 to 60 Degr

Industrial Ethernet Extender

The IVC-2002 series equip with compact, IP30 standard metal case allows either DIN-rail or wall-mounting for efficient use of cabinet space and can operates reliably in Heavy Industrial demanding environment.

With 4 10/100Mbps auto-negotiation ports and one VDSL2 BNC / RJ-11 combo port for current popular Ethernet over VDSL2 connection (symmetry means upstream and downstream rate are the same or similar). It is ideal for signal conversion by transmitting the Ethernet data from the standard RG58 cable to the coaxial cable or existing copper telephone line to extending the distance.

The PLANET IVC-2004PT, an Industrial grade Ethernet Extender with PoE supported, integrates three advanced technologies:

- Ethernet extend over coaxial cable or phone wire
- IFFE 802 3af Power over Ethernet

SFP Fiber Optical slot 0Base-T Ethernet

Industrial wide range operating temperature

The IVC-2004PT is designed to utilize the commonly existed coaxial cables or phone wires to extend the UTP Ethernet over 100m distance limitation and transmits both power and data over single Ethernet cable to remote PoE capable devices in heavy industrial demanding environments.

IVC-2002 IVC-2004PT Long reach Ethernet and extend transmission d Up to 2.4km (7,874 ft) over coaxial cable Up to 1.4km (4,500 ft) over twisted phone wire Up to 95Mbps transmit performance under 200

- Up to 95Mbps transmit performance under 200m
 -40 to 75 Degree C wide range operating temperat
- 10 to 75 Degrée C wide range operat
 2~48V DC Redundant Power Design
 130 metal case

• Up to 95Mbps transmit performance under 200m (656 ft) 15.4 Watts full power inject by each PoE port -40 to 75 Degree C wide range operating temperature 48V DC Redundant Power Design IP30 metal case

DIN-rail Power Supply

As Industrial Ethernet equipments specially designed for the harsh working environment, sometimes it is hard to find suitable DC voltage power source for the industrial Ethernet devices. To conquer this limit and assure industrial equipments get DC power easily, PLANET now releases the PWR series - DC Single Output Industrial DIN Rail Power Supply Units. The DC Single Output Industrial DIN Rail Power Supply Units accept universal 100-240 AC input voltage or DC input and provides 24V / 48V DC power output with various Watts value. The Power Supply units are designed in compact size and can be installed on DIN rail TS-35 / 7.5 or 15. It is an ideal and convenient DC power feeding solution for Industrial equipments under heavy Industrial environments.

The DC Single Output Industrial DIN Rail Power Supply Units provides various models with Short circuit / Overload / Over voltage and Over temperature protections for the Industrial Ethernet Equipments operating stably. Meanwhile, it uses free air convection cooling. Being able to operate under the temperature range from -20 to 70 Degree C (maximum), the DC Single Output Industrial DIN Rail Power Supply Units can be placed in almost any difficult environments.



- Long reach Ethernet and extend transmission distance:
- Up to 2.4km (7,874 ft) over coaxial cable
- Up to 1.4km (4,500 ft) over twisted phone wire

