

5-Port 10/100Mbps with 4-Port PoE Industrial Ethernet Switch - Wide Temperature



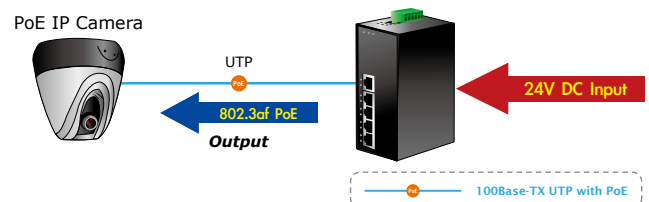
The PLANET **ISW-504PT PoE Industrial Ethernet Switch** is designed to transmit power and data over single Ethernet cable to remote PoE capable devices and operates reliably in heavy industrial demanding environments. The ISW-504PT provides 5 10/100Mbps copper ports with **4-Port IEEE 802.3af Power over Ethernet** inject interfaces delivered in an IP-30 rugged strong case. Supporting up to 15.4Watts power per port for any remote IEEE 802.3af powered device (PD) such as PoE IP cameras and PoE wireless LAN access point, the ISW-504PT is an ideal solution to deploy surveillance system and wireless service in climatically demanding wide temperature range (-40 to 75 Degree C) environments.

IEEE 802.3af Power over Ethernet PSE Industrial Switch

PoE feature is more often supported in the industrial Ethernet devices for efficient operation in harsh environments. The ISW-504PT in-line power follows standard IEEE 802.3af and allows giving power to 4 PoE compliant devices at the distance up to 100 meters through the 4-pair Cat 5 / 5e UTP wire. With Data and Power over Ethernet from one unit, the ISW-504PT shall reduce cables deployment and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire carries both data and power lowering the installation costs, simplifying the installation effort and eliminating the need for electricians or extension cords. Furthermore, there is only 24V DC input in some industrial environments, the ISW-504PT series supports 24V DC or 48V DC dual voltages input and able to provide more wide range of industrial IEEE 802.3af PoE applications.

Wide Temperature conquers installation in harsh environments

The ISW-504PT 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 wide temperature range from **-40 to 75 Degree C**, the ISW-504PT can be placed in almost any difficult environment. It also offers dual-redundant, reversible polarity **24V DC** or **48V DC** power inputs for high availability applications requiring backup power inputs.



Robust Switch performance

The ISW-504PT offers high performance switch architecture with 5 10/100Mbps UTP ports. It provides non-blocking switch fabric, wire-speed throughput as high as 1Gbps and the 2K MAC Address table. It also performs wire-speed packets transfer without risk of packet loss and the Flow Control function is default enabled to provide fast and reliable data transfer.

All of the RJ-45 copper interfaces support 10/100Mbps Auto-Negotiation for optimal speed detection through RJ-45 Category 3, 4, 5, 5e or 6 cable. 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

- 5-Port 10/100Mbps RJ-45 with auto MDI/MDI-X function
- 4-Port support 48V DC power to PoE Powered Device (Port-1 to Port-4)

IEEE 802.3af PoE

- Complies with IEEE 802.3af Power over Ethernet End-Span PSE
- Up to 4 IEEE 802.3af devices powered
- Supports PoE Power up to 15.4 Watts for each PoE port
- Auto detect powered device (PD)
- Circuit protection prevent power interference between ports
- Remote power feeding up to 100m

Layer 2 Features

- Supports Auto-Negotiation and 10/100Mbps Half / Full Duplex and Auto MDI/MDI-X
- High performance Store and Forward architecture, 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)
- Automatic address learning and address aging
- Integrated address look-up engine, support 2K absolute MAC addresses
- CSMA / CD Protocol

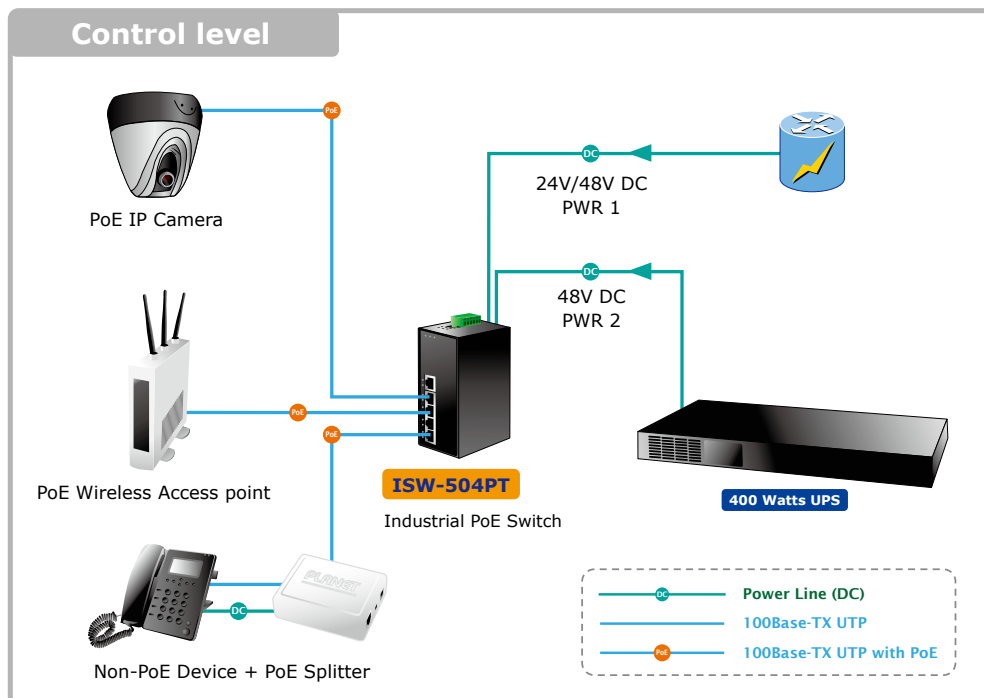
Industrial Case / Installation

- IP-30 Aluminum metal case protection
- DIN Rail and Wall Mount Design
- Redundant Power Design
- 24V or 48V DC, redundant power with polarity reverse protect function
- Supports EFT protection 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- -40 to 75 Degree C operation temperature

APPLICATIONS

Industrial area Department/ Workgroup PoE Switch

Providing up to 4 PoE, in-line power interface, the ISW-504PT can easily build a power centrally-controlled IP phone system, IP surveillance system, and wireless AP group for the enterprise. For instance, 4 camera / AP can be easily installed around the corner of the company for surveillance demands or building a wireless roaming environment in the office. Without the power-socket limitation, the ISW-504PT makes the installation of IP cameras or WLAN AP more easily and efficiently.



SPECIFICATION

Product	5-Port 10/100Mbps with 4-Port PoE Industrial Ethernet Switch (-40~75 Degree C)	
Model	ISW-504PT	
Hardware Specification		
10/100Base-TX Ports	5	
IEEE 802.3af PoE ports	4	
Dimension (D x W x H)	135 x 87.8 x 56 mm	
Weight	842g	
Power LED	Power1, Power2 and Fault Port 1~4: PoE in-use, LNK / ACT Port 5: LNK / ACT	
Power Requirement	24 or 48 VDC input Redundant power with polarity reverse protection function	
Installation	DIN Rail kit and Wall Mount ear	
Alarm	Provides one relay output for power fail Alarm Relay current carry ability: 1A @ DC 24V	
Power over Ethernet		
PoE Standard	IEEE 802.3af Power over Ethernet / PSE	
PoE Power Supply Type	End-Span	
PoE Power Output	Per Port 48V DC, 350mA . Max. 15.4 Watts	
Power Pin Assignment	1/2(+), 3/6(-)	
Switch Specification		
Switch Processing Scheme	Store-and-Forward	
Address Table	2K entries	
Flow Control	Back Pressure for Half Duplex IEEE 802.3x Pause Frame for Full Duplex	
Switch fabric	1Gbps	
Throughput (packet per second)	0.74Mpps@64bytes	
Network cables	10/100Base-TX: Cat. 3, 4, 5, 5e and 6 UTP cable (100meters max.) EIA/TIA-568 100-ohm STP (100meters, max.)	
Regulation Compliance	FCC Part 15 Class A, CE	
Stability Testing	IEC60068-2-32 (Free Fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)	
Standard Compliance	IEEE 802.3	Ethernet
	IEEE 802.3u	Fast Ethernet
	IEEE 802.3x	Flow Control
	IEEE 802.3af	Power over Ethernet
Environment		
Temperature	Operating: -40~75 Degree C Storage: -40~85 Degree C	
Humidity	Operating: 5~90%, Storage: 5~90% (Non-condensing)	

ORDERING INFORMATION

ISW-504PT	5-Port 10/100Mbps with 4-Port PoE Industrial Ethernet Switch (-40~75 Degree C)
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RELATED PRODUCTS

ISW-514PT	4-Port 10/100Mbps with PoE +1-Port 100FX(MM, SC) Industrial Ethernet Switch - 2km (-40~75 Degree C)
ISW-514PT15	4-Port 10/100Mbps with PoE +1-Port 100FX(SM, SC) Industrial Ethernet Switch - 15km (-40~75 Degree C)
ISW-514PTF	4-Port 10/100Mbps with PoE +1-Port 100FX(SFP) Industrial Ethernet Switch - 15km (-40~75 Degree C)
ISW-504PS	5-Port 10/100Mbps with 4-PoE Industrial Web Smart Switch (-10~60 Degree C)
ISW-514PS	4-Port 10/100Mbps with PoE +1-Port 100FX(MM, SC) Industrial Web Smart Switch - 2km (-10~60 Degree C)
ISW-514PS15	4-Port 10/100Mbps with PoE +1-Port 100FX(SM, SC) Industrial Web Smart Switch - 15km (-10~60 Degree C)
ISW-514PSF	4-Port 10/100Mbps with PoE +1-Port 100FX(SFP) Industrial Web Smart Switch - 15km (-10~60 Degree C)

RELATED POE PRODUCTS

POE-151S-5V	IEEE 802.3af Power over Ethernet Splitter with 5V DC output
POE-151S-12V	IEEE 802.3af Power over Ethernet Splitter with 12V DC output
POE-E101	IEEE 802.3af Power over Ethernet Extender
ICA-H312	H.264 25-meter IR Internet Camera
ICA-H610	H.264 Indoor CCD Internet Camera
ICA-HM100	Wired H.264 Mega-Pixel IP Camera
ICA-HM120	H.264 Mega-Pixel Box IP Camera
ICA-HM125	2 Mega-Pixel H.264 Box IP Camera
ICA-HM126	H.264 Full HD Box IP Camera
ICA-HM131	H.264 Full-HD Fixed Dome IP Camera
ICA-HM135	H.264 Mega-Pixel 20M IR Vandal Proof Dome IP Camera
ICA-HM240	H.264 Mega-Pixel Vandal Proof Pan/Tilt IP Camera
IVS-110	1-Channel Internet Video Server
WNAP-1120PE	802.11n Wireless Access Point with PoE
WNAP-3000PE	802.11n Enterprise PoE Access Point
WNAP-4033PE	54Mbps Wireless PoE Access Point
VIP-254PT	SIP PoE IP Phone
VIP-255PT	Multi-Language PoE IP Phone
VIP-360PT	Enterprise PoE IP Phone
VIP-560PT	Professional PoE IP Phone
VIP-156PE	802.3af PoE SIP Analog Telephone Adapter