

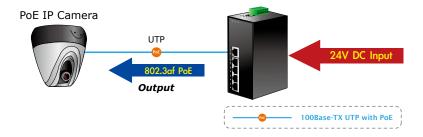
# 4-Port 10/100Mbps with PoE + 1-Port 100FX Industrial Web Smart Switch



The PLANET ISW-514PS series, a Web management Industrial PoE Switch, is designed to transmit power and data over single Ethernet cable to remote PoE capable devices and performs intelligent PoE control, power usage monitoring and smart Layer 2 switching management in industrial harsh environments. The ISW-514PS series provides four 10/100Mbps copper ports supporting IEEE 802.3af Power over Ethernet injector and one 100Base-FX fiber optic interface delivered in an IP-30 rugged strong case. Supporting up to 15.4 watts 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-514PS series is an ideal solution to deploy surveillance system and wireless service in climatically demanding wide temperature range (-10 to 60 Degree C) environments

#### IEEE 802.3af Power over Ethernet Industrial Switch

PoE feature is more often supported in the industrial Ethernet devices for efficient operation in harsh environments. The ISW-514PS series in-line power follows standard IEEE 802.3af and able to give 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-514PS 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. Furthermore, there is only 24V DC input in some industrial environments, the ISW-514PS series supports **24V DC** or **48V DC** dual voltages input and able to provide more wide range of industrial IEEE 802.3af PoE applications.



## Fiber Optic Link Capability for Flexible Distance Extension

The ISW-514PS series equips **one 100Base-FX port** that provides more flexibility for Transportation, Manufacturing, Security and Surveillance on distance extension without any limitation. The ISW-514PS series offers high performance switch architecture as below:

ISW-514PS equips with 4 10/100Mbps UTP ports and 1 100FX (SC interface within 2km)

ISW-514PS15 equips with 4 10/100Mbps UTP ports and 1 100FX (SC interface within 15km)

ISW-514PSF equips with 4 10/100Mbps UTP ports and 1 100FX (LC interface within optional of Single / Multi-Mode SFP module)

#### **Excellent Web Smart Features**

For efficient management, the ISW-514PS series is built with Web-Based management design to offer a user-friendly configuration interface. It makes the ISW-514PS series easy to survey and control the PoE power provision to the devices via the Web interface. The ISW-514PS series features Web Smart functions including 802.1Q VLAN, bandwidth control, QoS, PoE Configuration, Port Management, Alert Trap Configuration and etc. These features provide a cost-effective way to manage the network devices through the Internet whenever you are at work or at home.



ISW-514PS ISW-514PS15 ISW-514PSF

#### **Environmentally Hardened Design**

With IP-30 industrial case protection, the ISW-514PS series 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. The aluminum metal case helps cooling excellently and enables the Industrial PoE Switch to operate stably under the harsh temperature environment ranges from -10 to 60 Degree C. Therefore, the web management Industrial PoE Switch can be placed in almost any difficult environment. It also offers dual-redundant, reversible polarity 24V DC or 48V DC power supply inputs for high availability applications requiring dual or backup power inputs.

#### KEY FEATURES

### PHYSICAL PORT

- ISW-514PS
  - 4-Port 10/100Base-TX RJ-45 with IEEE 802.3af PoE injector
  - 1-Port 100Base-FX Multi-mode SC interface 2km
- ISW-514PS15
  - 4-Port 10/100Base-TX RJ-45 with IEEE 802.3af PoE injector
  - 1-Port 100Base-FX single mode SC interface 15km
- ISW-514PSF
  - 4-Port 10/100Base-TX RJ-45 with IEEE 802.3af PoE injector
  - 1-Port 100Base-FX SFP interface

#### 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

# POE MANAGEMENT

- Total PoE Power Budget Control
- Enable / Disable PoE Function on each port
- PoE port Power Feeding priority
- Power limit on PoE port
- PD Classification Detection

#### WEB MANAGEMENT

- Web interface for remote management
- Firmware upgrade through Web interface
- PLANET Smart Discovery utility automatically finds PLANTE devices on the network
- SNMP Trap for alarm notification of events
- VLAN and QoS configuration

### 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, supports 1K absolute MAC addresses
- CSMA/CD Protocol

#### INDUSTRIAL CASE / INSTALLATION

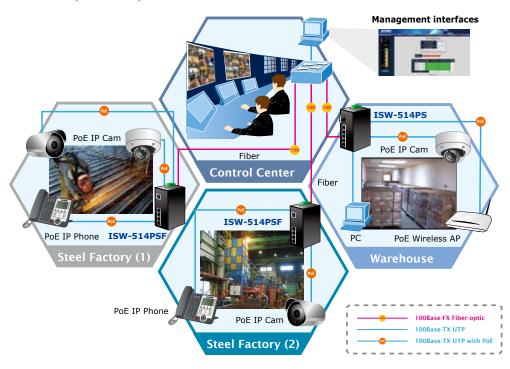
- IP-30 aluminum metal case protection
- DIN Rail and Wall Mount Design
- Redundant Power Design
- 24 or 48V DC, redundant power with polarity reverse protect function
- Supports EFT protection 6000V DC for power line
- Supports 6000V DC Ethernet ESD protection
- -10 to 60 Degree C operation temperature

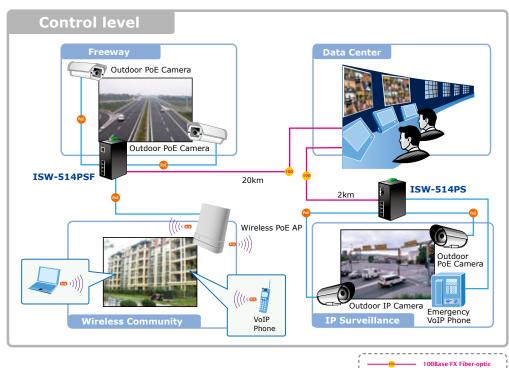


### **APPLICATIONS**

### Industrial area Department / Workgroup PoE Switch

Providing up to 4 PoE, in-line power interface, the **ISW-514PS series Industrial Switch** 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-514PS series makes the installation of IP cameras or WLAN AP more easily and efficiently.









#### SPECIFICATION

Product	Temperature	with PoE + 1-Port 100FX Indu	Januar Editerrice Switch Wide		
Model	ISW-514PS	ISW-514PS15	ISW-514PSF		
10/100Base-TX Ports	4	4	4		
100Base-FX Port	1	1	1		
Fiber Port Type	Multi-Mode	Single Mode	Vary on SFP		
Connector Type	SC	SC SC	SFP SFP		
Maximum Distance	2km	15km	Vary on SFP		
Optical Frequency	1300nm	1310nm	Vary on SFP		
optical Frequency	Max.: -14	Max.: 0	vary on sri		
Launch Power (dBm)	Min.: -20	Min.: -20	Vary on SFP		
Receive Sensitivity (dBm)	-32	-32	Vary on SFP		
IEEE 802.3af PoE Ports	-52 -52 Valy OII 5FF				
Dimension (D x W x H)	•				
Weight	135 x 87.8 x 56 mm				
vveignt	871g Power1, Power2 and Fault				
Power LED	·				
rower LED	Port T I NK/ACT				
D D	Port 5: LNK/ACT				
Power Requirement	24 or 48 VDC, Redundant power with polarity reverse protection function				
Enclosure	IP-30 aluminum metal ca	aze			
Protection	ESD (Ethernet): 6KV DC				
losto llatio :-	Surge (Power): 6KV DC	west and			
Installation	DIN Rail kit and Wall Mount ear				
Alarm	One relay output for power fail Alarm Relay current carry ability: 1A @ DC 24V				
B	Alarm Kelay current carry	y admity: TA @ 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				
Switch fabric	1Gbps				
Throughput (packet per second)	0.74Mpps@64bytes				
Address Table	1K entries				
Maximum Frame Size	1536 Bytes				
Pack Buffer	512k bits				
Flow Control	Back Pressure for Half Duplex				
TIOW CONTROL	IEEE 802.3x Pause Frame for Full Duplex				
	• 10/100Base-TX:				
	- 2-Pair UTP Cat. 3, 4, 5, 5e, 6 (100meters, max.)				
Naturali sable -	- EIA/TIA-568 100-ohm STP (100meters, max.)				
Network cables	• 100Base-FX:				
	- Multi-Mode optic fiber 62.5/125µm or 50/125µm				
	- Single-Mode optic fiber 9/125µm				
Layer 2 Function		·			
Management	Web management, SNM	P Trap			
J	Port-Based VLAN				
VLAN		VLAN, Up to 16 VLAN groups			
	2 priority queues for three type of Class of Service				
	Port-Based				
QoS	• IEEE 802.1p priority tag				
Q03	TCP/IP header's DSCP classifier				
	Veighted Round Robin queue scheduling				
	-	-			
	Inbound Rate Limit and Outbound Traffic shaping  Disable, 12.5%, 25%, 50%, 62.5% 4 levels				
Bandwidth Control Storm Control		, ,			



**ISW-514PS** ISW-514PS15 **ISW-514PSF** 

Standards Conformance			
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 IEEE 802.1p Class of Service IEEE 802.1Q VLAN Tagging		
Layer 2 Function			
Temperature	Operating: -10~60 Degree C Storage: -40~85 Degree C		
Humidity	Operating: 5~90% Storage: 5~90% (Non-condensing)		

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 (-10~60 Degree C)

# AVAILABLE SFP MODULE FOR ISW-514PSF

MFB-TFX	SFP-Port 100Base-FX Transceiver (1310nm) -2km (-40~75 Degree C)
MFB-TF20	SFP-Port 100Base-FX Transceiver (1310nm) - 20km (-40~75 Degree C)

# RELATIVE POE PRODUCT

POE-151S	IEEE 802.3af Power over Ethernet Splitter with 5V / 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-560PE	Professional Enterprise PoE IP Phone with Expansion Function
VIP-156PE	802.3af PoE SIP Analog Telephone Adapter

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