

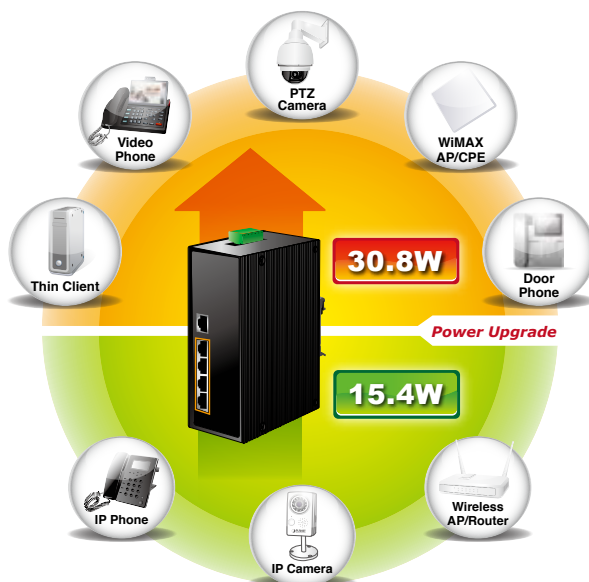
# Industrial 5-Port Gigabit Switch w/ 4-Port 802.3at PoE+



PLANET IGS-504HPT is an Industrial Gigabit 802.3at PoE+ Switch providing Power over Ethernet capability and non-blocking wire-speed Gigabit performance in harsh industrial environment. It provides 4-port 10/100/1000Base-T copper with 802.3af/at PoE injector delivered in an IP30 rugged strong case with redundant power system. The IGS-504HPT is well suited for applications in deploying surveillance system, and securing control and wireless service in climatically demanding environments with wide temperature range from -40 to 75 degrees C.

## High Power PoE for Security and Public Service Applications

To fulfill the demand of High Power PoE for network applications with Gigabit speed transmission under wide temperature, the IGS-504HPT provides 4 10/100/1000Mbps ports featuring both IEEE 802.3af and IEEE 802.3at Power over Ethernet Plus (PoE+) that combine up to 30 watts of power output and data per port over one Cat.5E / 6 Ethernet cable. With totally 120-watt PoE budget on the whole system, the IGS-504HPT is designed specifically to satisfy the growing demand of higher power consuming network PD (powered devices) such as PTZ (Pan, Tilt & Zoom) / Speed Dome network cameras, multi-channel (802.11a / b / g / n) outdoor wireless LAN access points and other PoE network devices by providing double PoE power, rather than the current conventional 802.3af PoE.



## Physical Port

- 5-port 10/100/1000Base-T RJ-45 with 4-port IEEE 802.3af / 802.3at PoE Injector

## Power over Ethernet

- Complies with IEEE 802.3af / IEEE 802.3at Power over Ethernet Plus End-Span PSE
- Up to 4 IEEE 802.3af / 802.3at devices powered
- Supports PoE Power up to 30.8 watts for each PoE port
- Provides DC 52V power over RJ-45 Ethernet cable to PD with Ethernet port
- Auto-detects IEEE 802.3af/at equipment and protects devices from being damaged by incorrect installation
- Remote power feeding up to 100m

## Layer 2 Features

- Supports Auto-Negotiation and 10/100Mbps half / full duplex and 1000Mbps full duplex mode
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x PAUSE frame flow control (full-duplex)
- Automatic address learning and address aging

## Industrial Case / Installation

- IP30 aluminum metal case protection
- DIN Rail and Wall Mount Design
- 48V DC redundant power with polarity reverse protect function and connective removable terminal block for master and slave power
- Supports EFT protection of 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- -40 to 75 degrees C operating temperature

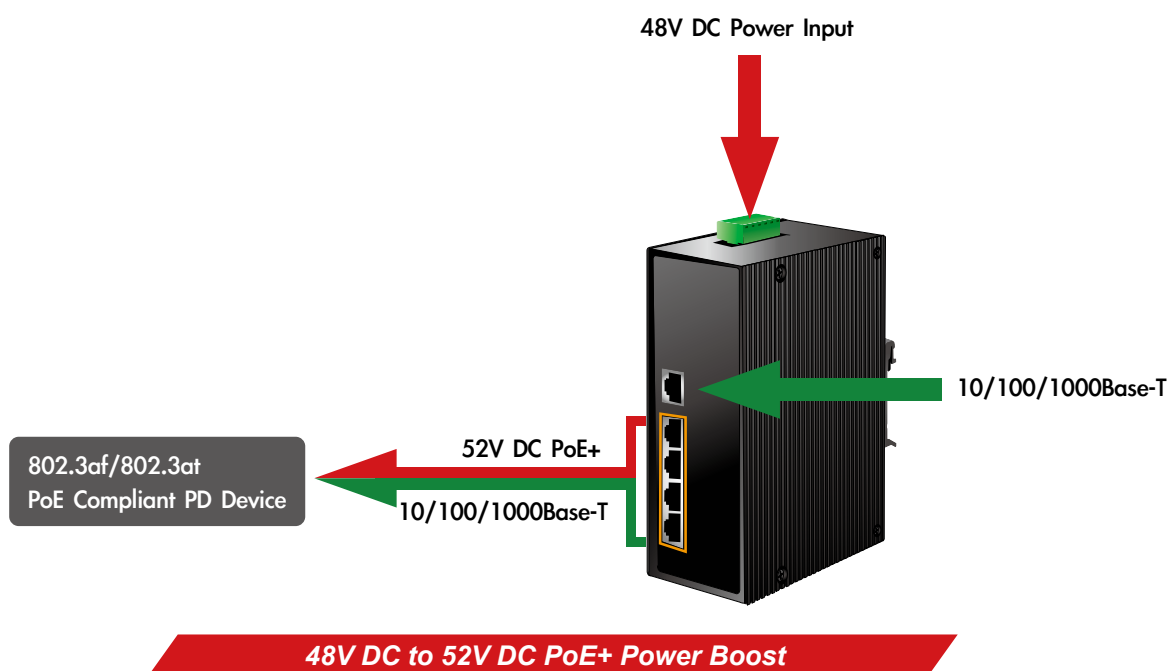
*Intelligent LED Indicator for Real-time PoE Usage*

The IGS-504HPT helps users to monitor the current status of PoE power usage easily and efficiently by its advanced LED indication. Called "PoE Power Usage", the front panel of the Industrial Gigabit PoE+ Switch has four orange LEDs indicating 30W, 60W, 90W and 120W of power usage.



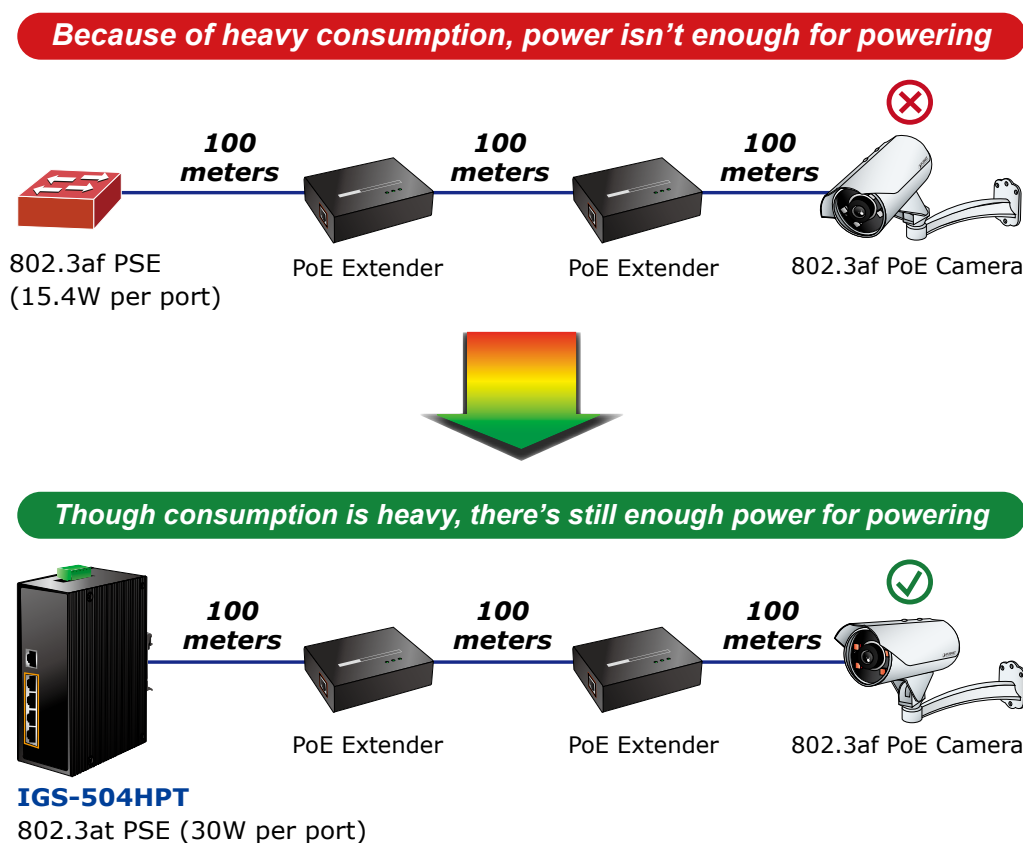
*Convenient and Reliable Power System*

To facilitate the 802.3at High Power PoE usage with the commonly used 48V DC power input in transportation and industrial-level applications, the IGS-504HPT adopts 48V DC to 52V DC power boost technology to solve power source issue which is not required for special power supplies to achieve the level of High Power PoE+ output. To enhance the operation reliability and flexibility, the IGS-504HPT is equipped with two DC power input connectors for redundant power supply installation.



### High Power Budget for PoE Extension

With 30-watt PoE output capability, the IGS-504HPT can extend much longer distance by using PLANET PoE Extender for powering up the IEEE 802.3af PoE PD devices which can be installed over more than 100 meters away. By daisy-chaining multiple PLANET PoE Extenders, it offers the great flexibility of doubling, tripling or quadrupling the distance of PoE network.



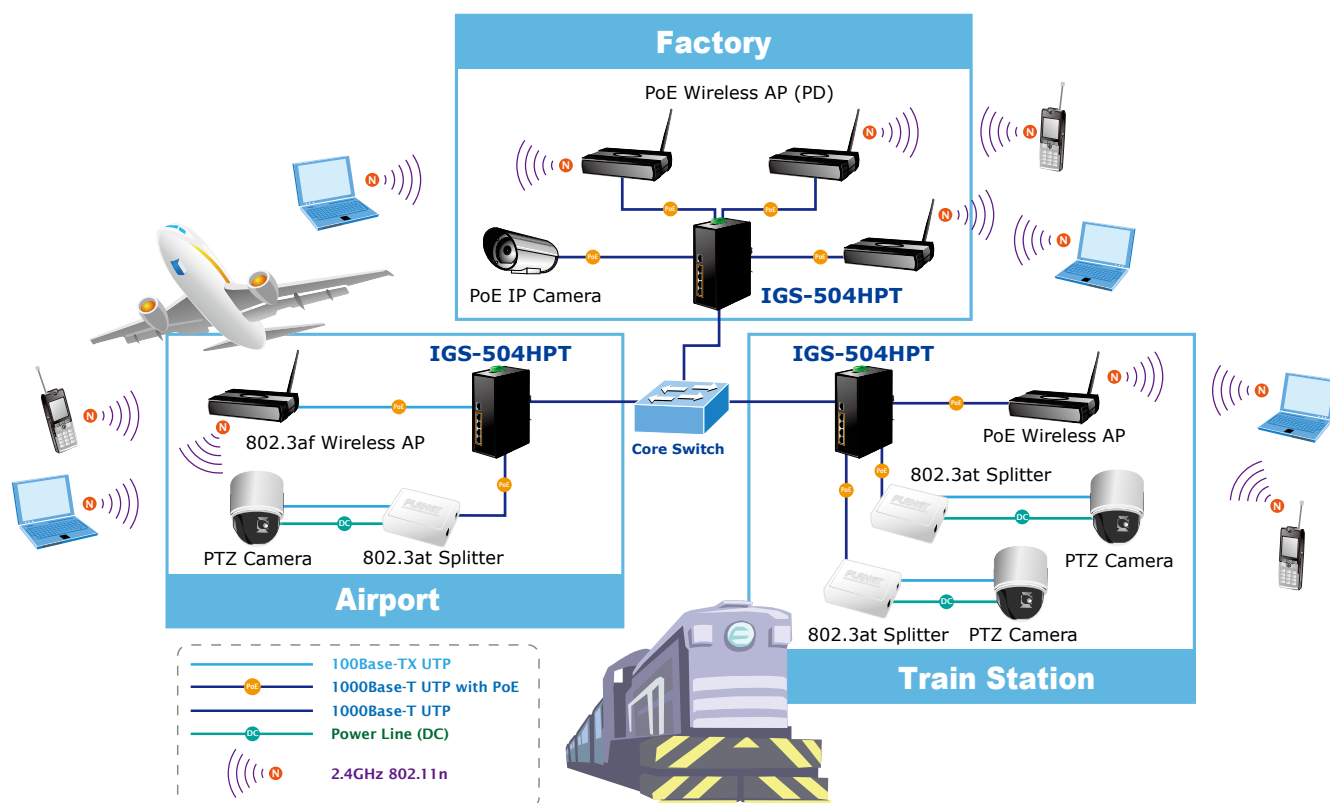
### Environmentally Hardened Design

The IGS-504HPT is equipped with the rugged IP30 metal case for easy deployment in heavy Industrial demanding environments. With IP30 industrial case protection, the IGS-504HPT 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 -40 to 75 degrees C, the IGS-504HPT can be placed in almost any difficult environment. The IGS-504HPT also allows either DIN rail or wall mounting for efficient use of cabinet space.

## Application

### High Power IP Surveillance and Wireless LAN Service in Hardened Environment

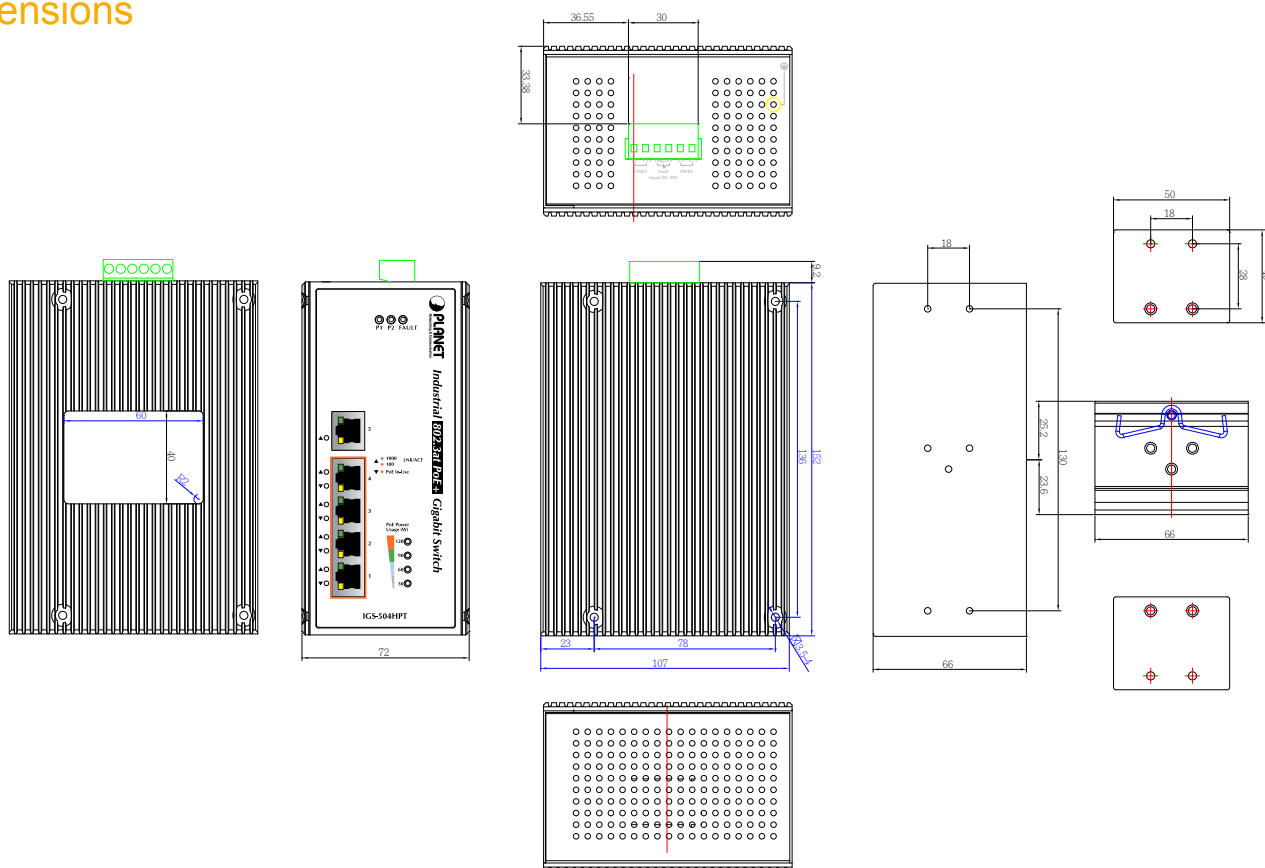
The IGS-504HPT Industrial PoE+ Switch offers full port Gigabit speed. It provides very high reliability and security features to make sure the continuous operation in harsh environments such as control cabinet of transportation, factory, outdoor and places where extreme low or high temperatures can be experienced. Having the capability of IEEE 802.3at Power over Ethernet standard, the IGS-504HPT can directly connect with any IEEE 802.3at end-nodes like PTZ (Pan, Tilt & Zoom) network cameras, PTZ Speed Dome cameras, color touch-screen Voice over IP (VoIP) telephones, and multi-channel wireless LAN access points. Besides the wired Internet network, the wireless LAN would be more efficient for the transportation station to provide high-speed and wide area Internet services for travelers. By adopting PoE Wireless LAN structure, the transportation authority gains benefits from less cost while providing better Internet services in wider areas for the travelers.



## Specifications

Model	IGS-504HPT
<b>Hardware</b>	
Copper Ports	5 x 10/100/1000Base-T RJ-45 TP Auto-MDI/MDI-X, Auto-Negotiation
Connector	Removable 6-pin terminal block Pin 1/2 for Power 1; Pin 3/4 for fault alarm; Pin 5/6 for Power 2
Alarm	Provides one relay output for power failure Alarm Relay current carry ability: 1A @ DC 24V
LED	3 x LED for System and Power: <ul style="list-style-type: none"> <li>▪ Green: DC Power 1</li> <li>▪ Green: DC Power 2</li> <li>▪ Green: Power Fault</li> </ul> 2 x LED for Per Copper Port (Port-1~Port-4): <ul style="list-style-type: none"> <li>▪ Green: 1000 LNK/ACT, Orange:100 LNK/ACT</li> <li>▪ Orange: PoE In-use</li> </ul> 1 x LED for Per Copper Port (Port-5) <ul style="list-style-type: none"> <li>▪ Green: 1000 LNK/ACT, Orange:100 LNK/ACT</li> </ul> 4 x LED for PoE Power Usage (W) <ul style="list-style-type: none"> <li>▪ Orange: 30, 60, 90 and 120W</li> </ul>
ESD Protection	6KV DC
EFT Protection	6KV DC
Enclosure	IP30 aluminum metal case
Installation	DIN rail kit and wall mount ear
Dimensions (W x D x H)	152 x 107x 72 mm
Weight	1478g
Power Requirements	48V DC, 5A max. Redundant power with polarity reverse protection function
Power Consumption / Dissipation	14.1 watts / 48 BUT (Full loading without PoE function) 134.1 watts / 457 BTU (Full loading with PoE function)
<b>Power over Ethernet</b>	
PoE Standard	IEEE 802.3af / IEEE 802.3at Power over Ethernet / PSE
PoE Power Supply Type	End-Span
Power Pin Assignment	1/2(+), 3/6(-)
PoE Power Output	Per port 52V DC, 275mA. Max. 15.4 watts (IEEE 802.3af) Per port 52V DC, 535mA. Max. 30 watts (IEEE 802.3at)
Max. number of Class 4 PD	4
<b>Switch Specification</b>	
Switch Processing Scheme	Store-and-Forward
Address Table	1K entries
Flow Control	Back pressure for half duplex IEEE 802.3x Pause Frame for full duplex
Switch fabric	10Gbps
Throughput (packet per second)	7.44Mpps@64bytes
Maximum Transmit Unit	9216 bytes
Speed	TP: 10/20Mbps, 100/200Mbps, 2000Mbps
<b>Standards Conformance</b>	
Standards Compliance	IEEE 802.3 Ethernet / 10Base-T IEEE 802.3u Fast Ethernet / 100Base-TX IEEE 802.3ab Gigabit Ethernet / 1000Base-T IEEE 802.3x Full-Duplex Flow Control IEEE 802.3at High Power over Ethernet IEEE 802.3af Power over Ethernet
Regulation Compliance	FCC Part 15 Class A, CE
Stability Testing	IEC60068-2-32(Free fall) IEC60068-2-27(Shock) IEC60068-2-6(Vibration)
<b>Environment</b>	
Temperature	Operating: -40~75 degrees C Storage: -40~75 degrees C
Humidity	Operating: 5~95% (Non-condensing) Storage: 5~95% (Non-condensing)

## Dimensions



## Ordering Information

IGS-504HPT	<b>Art. No. 152484</b>	Industrial 5-Port Gigabit Switch w/ 4-Port 802.3at PoE+
------------	------------------------	---

## Related PoE Products

ICA-2200	Full HD PoE Box IP Camera
ICA-2500	5 Mega-Pixel PoE Box IP Camera
ICA-3250V	Full HD Outdoor IR PoE IP Camera
ICA-3350V	3 Mega-Pixel Vari-Focal Bullet IR IP Camera
ICA-4200V	Full HD 20M IR Vari-Focal Dome IP Camera
ICA-5350V	3 Mega-Pixel Vandalproof IR IP Camera
ICA-8350	3 Mega-Pixel Vandalproof Fish-eye IP Camera
ICA-HM101	2 Mega-Pixel PoE Cube IP Camera
ICA-HM126	H.264 Full HD Box IP Camera
ICA-HM127	3 Mega-Pixel H.264 Box IP Camera
ICA-HM132	H.264 2 Mega-Pixel 20M IR Vari-Focal Dome IP Camera
ICA-HM136	H.264 2 Mega-Pixel 20M IR Vandalproof Dome IP Camera
ICA-HM312	2 Mega-Pixel 25M IR Outdoor Bullet PoE IP Camera
ICA-HM316	2 Mega-Pixel Outdoor IR PoE IP Camera
ICA-HM351	2 Mega-Pixel 35M IR Outdoor Box PoE IP Camera
ICA-HM620	2 Mega-Pixel PoE Plus Speed Dome Internet Camera
POE-152S	IEEE 802.3af Power over Ethernet Splitter
POE-162S	IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E101	IEEE 802.3af Power over Ethernet Extender
POE-E201	IEEE 802.3at Power over Ethernet Extender
WNAP-C3220	802.11n Wireless Ceiling Mount PoE Access Point
WNAP-1120PE	802.11n Wireless Access Point with PoE
WNAP-6350	2.4GHz 300Mbps 802.11n Wireless Outdoor PoE Access Point
WNAP-7350	5GHz 300Mbps 802.11a/n Wireless Outdoor PoE Access Point

## Related DIN-Rail Power Supply

PWR-240-48

240W 48V DC Industrial DIN Rail Power Supply (-10~60 degrees C)

---