

# Industrial 4-Port 10/100/1000BASE-T 802.3at PoE+ Gigabit Ethernet Switch



#### A Perfect Full PoE+ Power Solution Ideal for Hardened Environment

With Plug and Play design, PLANET IGS-504HPT/IGS-614HPT Industrial-grade, DIN-rail type Unmanaged Gigabit Ethernet PoE+ Switch, featuring **four IEEE 802.3at PoE+ 10/100/1000BASE-T ports**, and **one extra 10/100/1000BASE-T** RJ45 copper port and one **100/1000BASE-X fiber** optic interface for uplink connection, allows to automatically detect and configure internal and external peripherals.

The IGS-504HPT/IGS-614HPT supports **12~54V DC** power input for power redundancy and operational flexibility. It comes with a total power budget of up to **120 watts** for different kinds of PoE applications and operating temperature ranging from **-40 to 75 degrees C** in a rugged IP40 metal housing.



IGS-614HPT

## Interface

- 5 10/100/1000BASE-T Gigabit Ethernet RJ45 copper ports
- One SFP slot, supporting 1000BASE-X and 100BASE-FX transceiver in dual modes (IGS-614HPT only)

#### Power over Ethernet

- Complies with IEEE 802.3at Power over Ethernet Plus, end-span PSE
- Backward compatible with IEEE 802.3af Power over Ethernet
- · Up to 4 ports of IEEE 802.3af/at devices powered
- Up to 120-watt PoE budget
- Supports PoE power up to 36 watts for each PoE port
- Each port supports 54V DC power to PoE powered device
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- · Remote power feeding up to 100m

### Layer 2 Switching

- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- IEEE 802.3x flow control for full duplex operation and back
  pressure for half duplex operation
- 2K MAC address table size
- 9K jumbo frame
- IEEE 802.1Q VLAN transparency
- · Automatic address learning and address aging
- · Supports CSMA/CD protocol

# Industrial Case and Installation

- IP40 metal case
- · DIN-rail, wall-mount or side wall-mount design
- 12~54V DC redundant power with reverse polarity protection
- Fault alarm for power input failed
- Supports 6KV DC Ethernet ESD protection
- · -40 to 75 degrees C operating temperature
- 4 real-time PoE power usage indicators



#### Convenient and Reliable Power System

To facilitate the 802.3at PoE+ usage with commonly used 12~54V DC power input for transportation and industrial-level applications, the IGS-504HPT/IGS-614HPT adopts **12~54V DC to 54V power boost technology** to solve power source issue but does not require special power supplies. The IGS-504HPT/ IGS-614HPT provides an integrated power solution with a wide range of voltages (12~54V DC) for worldwide operability. It also provides dual-redundant, reversible polarity 12~54V DC power supply inputs for high availability applications.





# Fiber Optic Link Capability for Flexible Distance Extension (IGS-614HPT Only)

The additional mini-GBIC slot built in the IGS-614HPT supports SFP auto-detection and dual speed as it features **100BASE-FX** and **1000BASE-SX/LX SFP** (Small Form-factor Pluggable) fiber-optic modules, meaning the administrator now can flexibly choose the suitable SFP transceiver according to the transmission distance or the transmission speed required to extend the network efficiently. The distance can be extended from 550 meters to 2 kilometers (multi-mode fiber) and to 10/20/40/60/80/120 kilometers (single-mode fiber or WDM fiber). They are well suited for applications to uplink to backbone switch and monitoring center in long distance.



# Plug and Play High Power Sourcing Solution

Complying with the **IEEE 802.3at Power over Ethernet Plus** technology, the IGS-504HPT/IGS-614HPT provides up to **36 watts** of PoE output power to allow users to flexibly deploy standard and high powered devices simultaneously with no need of software configuration. Furthermore, the IGS-504HPT/IGS-614HPT can extend much longer distance by using PLANET PoE Extender for powering up the PoE PD devices which can be installed over more than 100 meters away. By daisy-chaining multiple PoE extenders, it offers the great flexibility of doubling, tripling or quadrupling the distance of PoE network.



802.3at PSE(36W per port)



### Environmentally Hardened Design

With the **IP40** metal industrial case, the IGS-504HPT/IGS-614HPT 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 without air conditioning. It features a ventilated construction in which a cooling fan is not necessary, thereby making its operation noiseless. Being able to operate under the temperature range from **-40 to 75 degrees C**, the IGS-504HPT/IGS-614HPT can be placed in almost any difficult environment.

#### **Robust Protection**

The IGS-504HPT/IGS-614HPT provides contact discharge of ±6KV DC and air discharge of ±8KV DC for Ethernet ESD protection. It also supports ±6KV surge immunity to improve product stability and protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.

#### Intelligent LED Indicator for Real-time PoE Usage

The IGS-504HPT/IGS-614HPT helps users to monitor 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 PoE power usage.



# Flexible and Easy Installation with Limited Space

The compact sized IGS-504HPT/IGS-614HPT 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**



\* The above pictures are for illustration only.