

## POE-2400G

# 24-Port Gigabit IEEE 802.3at PoE+ Managed Injector Hub (440 watts)



PLANET **POE Managed PoE Injector Hub series**, a cost-effective and quick PoE solution, is designed to perfectly upgrade an existing network infrastructure to **IEEE 802.3at Power over Ethernet Plus** network system without replacing the existing Ethernet Switch.

## A Perfect Managed PoE+ Injector Hub

The POE-2400G is a high-density, rack-mountable managed IEEE 802.3at **POE+ injector** hub featuring PLANET intelligent PoE functions through **web user interface** for remote management.

As its name implies, the unit can inject a total PoE budget of 440 watts into PDs. Its 24 10/100/1000BASE-T Ethernet ports can each deliver up to 36 watts of power over Cat.5/5e/6 Ethernet UTP cables which allow data and power to transmit simultaneously to remote 802.3at/af powered devices (PDs).

The POE-2400G enables centralization of the power supply and optimizes the installation and power management of remote network devices, and provides a quick, safe and cost-effective Power over Ethernet network solution for small businesses and enterprises.



## Interface

- 48-port RJ45
- 24-port 10/100/1000Mbps "Data input"
- 24-port 10/100/1000Mbps "Data + Power output"
- One 10/100/1000BASE-T management port

## Power over Ethernet

- Complies with IEEE 802.3at Power over Ethernet Plus midspan PSE
- · Up to 24 IEEE 802.3at/802.3af devices powered
- 440-watt PoE budget
- Supports PoE power up to 30.8 watts (802.3at PoE+)/15.4 watts (802.3af PoE) for each PoE port
- Automatically detects PD
- · Circuit protection prevents power interference between ports
- · Remote power feeding up to 100m

## **PoE Management**

- · Total PoE power budget control
- Per port PoE power schedule
- PoE function enable/disable
- Per port PoE function enable/disable
- PoE port power feeding priority
- PD classification detection
- Over temperature protection
- PD alive check

## Management

- · Web interface for remote management
- Supports Network Time Protocol (NTP)
- Firmware upgrade through Web interface
- PLANET Smart Discovery utility automatically finds PLANET devices on the network
- · SNMP trap for alarm notification of events
- · System log/remote syslog

## Hardware

- · 19-inch rack mountable; 1U height
- Reset button for resetting to default setting and system
   reboot
- LED indicators for PoE ready and PoE activity
- LED indicators for power alert and fan alert



## Quick and Easy PoE Network Deployment

The POE-2400G is installed between a regular Ethernet Switch and the PDs. There are totally 48 RJ45 STP ports on the front panel of the POE-2400G, of which the 24 ports are on the lower stack functioned as "Data input" while the other 24 ports are on the upper stack functioned as "PoE (Data and Power) output". Both power and data are transferred simultaneously over the UTP cables to PDs without affecting the existing network performance and functions.



With data and Power over Ethernet from one unit, the POE-2400G can reduce power cable deployment and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place.

### IEEE 802.3at PoE+ Standard Compliance

The PoE in-line power adopting the **IEEE 802.3at Power over Ethernet Plus** standard makes the POE-2400G able to deliver per port up to **36 watts** of power to each remote PoE compliant PD. It possesses double amount of power capability than the conventional 802.3af PoE and is an ideal solution to satisfy the growing demand for higher power consuming network PDs, such as PTZ (pan, tilt and zoom), speed dome network cameras, color touch-screen or video and voice over IP (VoIP) telephones, multi-channel 802.11ac wireless LAN access points and other network devices.







## User-friendly Web Management Interface

To efficiently manage the PDs, the POE-2400G provides simple **Web management interface** in which administrators can control the system and PoE functions for PDs. It can automatically detect the power status of each port and show messages on its Web management interface. These features also provide users with a cost-effective way to manage the device via Internet whenever they are at work or at home.



## Built-in Unique PoE Functions for Powered Device Management

As it is the managed PoE Injector Hub for VoIP, wireless and surveillance networks, the POE-2400G features the following special PoE management functions:

- PoE schedule
- PD alive check
- Scheduled power recycling
- PoE usage monitoring
- Over temperature protection

### Intelligent Powered Device Alive Check

PLANET's Managed PoE products adopt not only Power over Ethernet technology, but also automated PD monitoring and real-time PoE status. The POE-2400G can be configured to monitor connected PD's status in real time via ping action through the uplinked Ethernet switch. Once the PD stops working and responding, the POE-2400G will recycle the PoE port power and bring the PD back to work. It also will greatly enhance the network reliability in that the PoE port will reset the PD power, thus reducing administrator's management burden.



## **PoE PD Alive Checking**



## PoE Schedule for Energy Saving

Under the trend of energy saving worldwide and contributing to environmental protection on the Earth, the POE-2400G can effectively control the power supply besides its capability of giving high watts power. The built-in "PoE schedule" function helps you to enable or disable PoE power feeding for each PoE port during specified time intervals and it is a powerful function to help SMBs or enterprises save power and money.



#### Advanced Power Management

To facilitate power management, the POE-2400G comes with powerful PoE management features such as **over temperature protection**, **usage threshold alert** and **auto power allocation** to prevent power budget overloading. The PoE power budget can be allocated by priorities or classification and sent alert event logs when power usage reaches the defined threshold.

## PoE Usage Monitoring

Via the power usage chart in the web management interface, the POE-2400G enables the administrator to monitor the status of the power usage of the connected PDs in real time. Thus, it greatly enhances the management efficiency of the facilities.

### High Power Budget for PoE Extension

With 36-watt PoE output capability, the POE-2400G can extend much longer distance by using PLANET PoE Extender for powering up the PoE PD 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.

### Smart Fan Design for Silent Operation

The POE-2400G features a low noise design and an effective ventilation system. It supports the smart fan technology that automatically controls the speed of the built-in fan to reduce noise and maintain the temperature of the PoE injector hub for optimal power output capability, with low speed and high speed smart fan status display on web interface. The POE-2400G is able to operate reliably, stably and quietly in any environment without affecting its performance.



## Applications

## Gigabit PoE Network Deployment

The POE-2400G provides the easiest way to power your Ethernet devices such as IP camera on the ceiling and the wireless access point installed on the top of the building. With 24 10/100/1000BASE-T Gigabit Ethernet ports, the POE-2400G supports full 52V DC power for any remote IEEE 802.3af/802.3at powered device (PD).

To control the power system of your networking devices, the POE-2400G can directly co-work with PoE IP phone to build VoIP telephony network in the office. Furthermore, the POE-2400G can be directly connected to any third-party IEEE 802.3af/802.3at compliant devices installed within 100 meters.





# Specifications

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Product		POE-2400G
Hardware		
Hardware Version		5
	"Data" Input Ports	24 x RJ45
Interface	"Data+Power" Output Ports	24 x RJ45
	Management Port	1 x RJ45; 10/100/1000BASE-T, auto-negotiation, auto-MDI/MDIX
Data Rate		10/100/1000Mbps
LED		System: SYS PWR x 1 (Green) PoE Failure x 1 (Red) Fan1 Failure x 1 (Red) Fan2 Failure x 1 (Red) Per PoE Port: PoE-in-use x 1 (Green) Management port x 2: 1000 (Green), 10/100 (Orange)
Network Cable		10BASE-T: 4-pair UTP Cat5 up to 100m (328ft) 100BASE-TX: 4-pair UTP Cat5 up to 100m (328ft) 1000BASE-T: 4-pair UTP Cat5e/6 up to 100m (328ft) EIA/TIA- 568 100-ohm STP (100m)
Power Requirements		100-240V AC, 50/60 Hz, 8A
Power Consumption		500 watts (max.)
Ventilation		Fan x 2
Dimensions (W x D x H)		440 x 300 x 44mm
Power over E	Ethernet	
PoE Power Supply Type		Mid-span
PoE Power Output		Per port DC 52V 30.8/15.4 watts
Power Pin Assignment		4/5(+), 7/8(-)
PoE Power Budget		440 watts@0~40 degrees C 400 watts@41~50 degrees C
-		Auto power budget control by over temperature protection function
Number of 802.3af PDs (Class 0, 1, 2, 3) can be powered		24
Number of 802.3at PDs (Class 1, 2, 3) can be powered		14
Number of 802.3at PDs (Class 0, 4) can be powered		14
Management	:	
Management Interface		Web, PLANET Smart Discovery Lite
PoE Management		Power limit by consumption and classification mode PoE admin mode Per port power schedule Per port power enable/disable Power feeding priority Over temperature protection Current per port usage and status Total power consumption
Management Feature		Setup of system/management functions Web firmware upgrade SNMP trap for alarm notification of events
Standards Conformance		
Regulatory Compliance		FCC Part 15 Class A, CE
Standards Compliance		IEEE 802.3 10BASE-T Ethernet IEEE 802.3u 100BASE-TX Fast Ethernet IEEE 802.3ab 1000BASE-T Gigabit Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3af Power over Ethernet RFC 768: UDP RFC 768: UDP RFC 791: IP RFC 2068 HTTP RFC 1157: SNMP v1 RFC 1902: SNMP v2c RFC 5424: Syslog
Environment	S	
Operating		Temperature: 0 ~ 50 degrees C Relative Humidity: 5 ~ 90% (non-condensing)
		Temperature: -10 ~ 70 degrees C



## **Ordering Information**

POE-2400G

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## **Related PoE Products**

HPOE-2400G	24-Port Gigabit IEEE 802.3at PoE+ Managed Injector Hub (720 watts)
HPOE-1200G	12-Port Gigabit IEEE 802.3at PoE+ Managed Injector Hub (360 watts)
POE-1200G	12-Port Gigabit IEEE 802.3at PoE+ Managed Injector Hub (220 watts)
POE-161S	IEEE 802.3at Gigabit Power over Ethernet Plus Splitter with 5V/12VDC output (10/100/1000Mbps)
POE-162S	IEEE 802.3at Gigabit Power over Ethernet Plus Splitter with 12V/24VDC output (10/100/1000Mbps)
IPOE-162S	Industrial 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 Gigabit Ethernet Extender
POE-E202	1-Port 802.3at PoE+ to 2-Port 802.3af/at Gigabit PoE Extender
LRP-101CH	1-Port 10/100TX PoE PD + 1-Port Coax Long Reach PoE Injector
LRP-101UH	1-Port 10/100TX PoE PD + 1-Port UTP Long Reach PoE Injector

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