

# 12-Port Gigabit IEEE 802.3at Power over Ethernet Injector Hub



### High Power PoE for Public Service PoE Applications

PLANET's HPOE-1200G is a next generation 12-Port Gigabit IEEE 802.3at High Power PoE Web Management Injector Hub that features both IEEE 802.3af and High Power IEEE 802.3at Power over Ethernet (PoE). The device can supply up to 30 Watts of power output and data per port over one CAT 5e/6 Ethernet cable. It is designed to satisfy the growing demand of high-power consuming network PDs (powered devices) such as PTZ (Pan, Tilt & Zoom) / Speed Dome network cameras, multi-channel (802.11a/b/g/n) wireless LAN access points and other network devices by providing double the amount of PoE power than conventional 802.3af PoE PSE.

### IEEE 802.3at PoE Pre-Standard Compliant

As the demand for PoE applications that require higher power continues to grow, customers are seeking for devices that support higher wattage of the IEEE 802.3at power over ethernet standard. The IEEE 802.3at Power over Ethernet standard is defined to allow the delivery of a maximum of up to 30 Watts of input power per PoE device. The IEEE 802.3at PoE standard is an ideal solution to fulfill the high power requirements through the existing RJ-45 Port interface. The HPOE-1200G possesses stronger power capability than existing 802.3af PoE PSE (power source equipment).

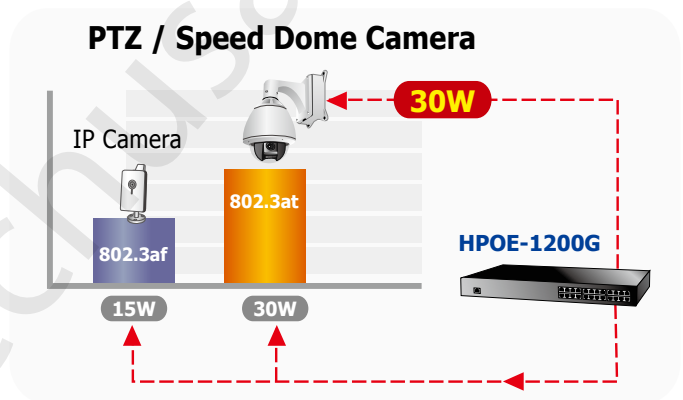


Figure: IEEE 802.3af and IEEE 802.3at PoE Power Compare

### Scheduled PoE Energy Saving

The HPOE-1200G is an energy efficient device that can effectively control the power supply with its "PoE Schedule" function. The function enables or disables PoE power feeding for each PoE port during specified time intervals and it is a powerful function that help SMBs or Enterprises save on power and money.

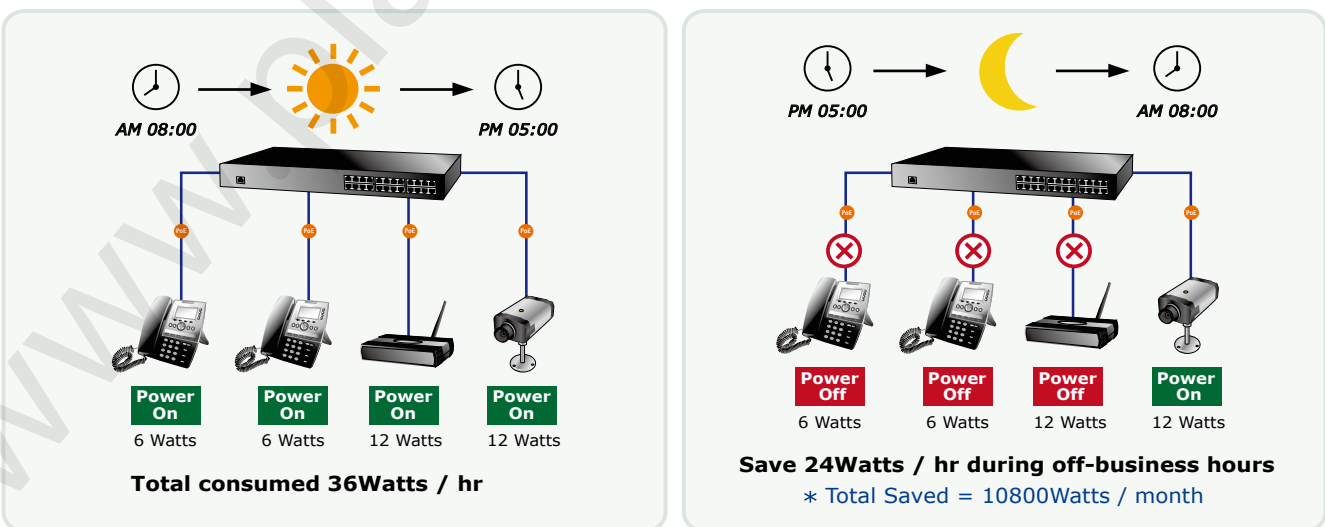


Figure: HPOE-1200G PoE Power Schedule

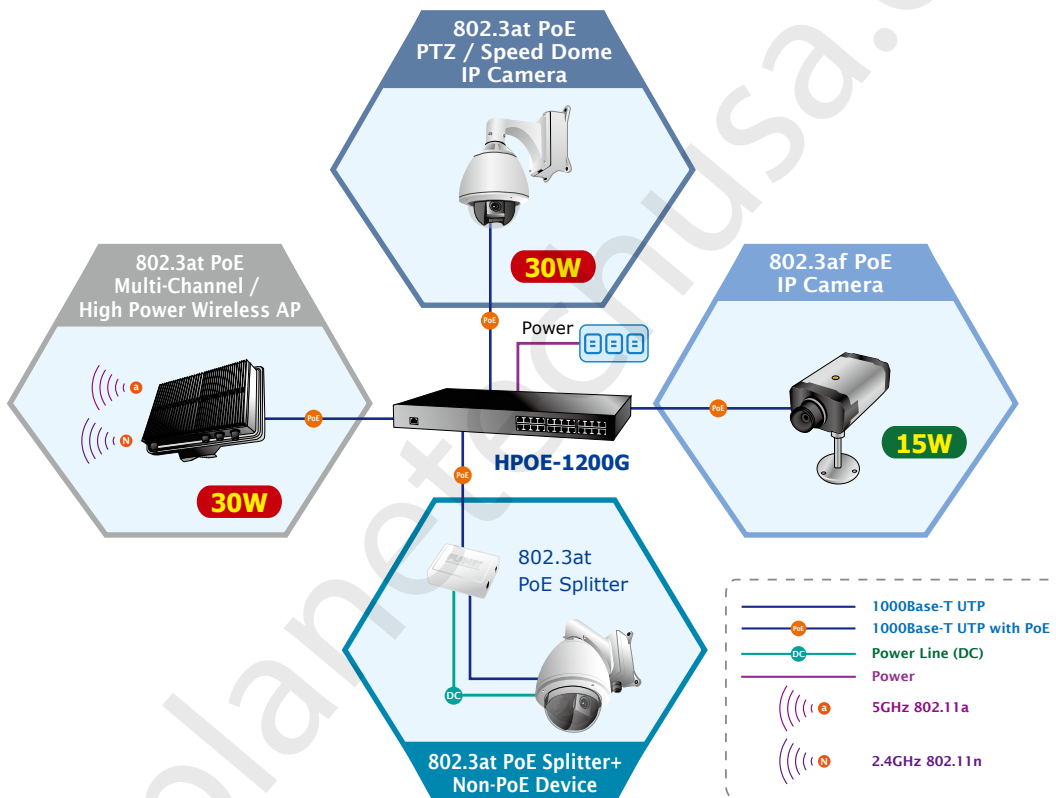
1000Base-T UTP with PoE

**Advanced Power Management**

To facilitate power management, the HPOE-1200G implements powerful PoE management features such as over temperature protection, usage threshold alert and auto power allocation to prevent overloading power budget. The PoE power budget can be prioritized or classified and even send alert event logs when power usage reaches the defined threshold. The HPOE-1200G centralizes the power supply and optimizes the installation and power management of remote network devices. It eliminates costs for additional AC wiring and reduces installation time.

**Quick and Easy PoE Network Deployment**

The HPOE-1200G complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3af standards and IEEE 802.3at standard. The HPOE-1200G supports 52V DC power for any remote 802.3af / 802.3at powered device (PD) with 12 10/100/1000Base-T Gigabit Ethernet ports. The device supports a PoE power budget of 340 Watts. The HPOE-1200G provides sufficient PoE power to support (15.4 Watts / 30.8 Watts per PoE port) up to 12 remote PD devices.



**'Plug and Play' Installation**

The HPOE-1200G is designed to be installed between a regular Ethernet Switch and powered devices. It injects power to the PDs without affecting data transmission performance. It offers a cost effective and quick solution to upgrade a network system to an IEEE 802.3af / IEEE 802.3at Power over Ethernet system without having to replace the existing Ethernet Switch. There are 24 RJ-45 STP ports on the front panel of the HPOE-1200G. Half of the ports on the lower stack function as "Data input" ports and the other half of the ports on the upper stack function as "PoE (Data and Power) output" ports. The 12 "PoE output" ports are also the power injectors that transmit DC Voltage to the CAT 5/5e/6 cable and simultaneously transfer data and power between the Injectors and Splitters.

**User-Friendly Web Management Interface**

To efficiently manage the powered devices, the HPOE-1200G provides a simple Web management interface in which administrators can control the functions including port Enable / Disable, port priority, system configuration, change Username / Password and other smart features for powered devices. The PoE injector Hub can automatically detect the power status of each port and show messages on its user-friendly Web management interface. These features also provide users with a cost-effective way to remotely manage the device via the Internet.

## KEY FEATURES

- 24-Port RJ-45
  - 12 -Port 10/100/1000Mbps “Data input”
  - 12 -Port 10/100/1000Mbps “Data + Power output”
- 1-Port 10/100Base-TX Management Port
- Power over Ethernet
- Complies with IEEE 802.3at and IEEE 802.3af Power over Ethernet Mid-Span PSE
- Up to 12 IEEE 802.3at / 802.3af devices powered
- Supports PoE power up to 30.8 Watts (802.3at PoE) / 15.4 Watts (802.3af PoE) for each PoE port
- Automatically detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters

## POE MANAGEMENT

- Total PoE power budget control
- Per port PoE power schedule
- PoE function enable / disable
- Per port PoE function enable / disable
- Per port 802.3at / 802.3af mode switch
- PoE port power feeding priority
- Per PoE port power limit
- PD classification detection
- Over Temperature Protection
- PoE Temperature Threshold
- PoE Power Usage Threshold

## 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 reset to default setting and system reboot
- LED indicators for PoE ready and PoE activity
- LED indicators for Power Alert and Fan Alert
- FCC Part 15 Class A, CE

## STANDARD COMPLIANCE

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3at pre-standard Power over Ethernet
- IEEE 802.3af Power over Ethernet
- RFC 768: UDP
- RFC 791: IP
- RFC 2068 HTTP
- RFC 1157: SNMPv1
- RFC 1902: SNMPv2c
- RFC 5424: Syslog

**APPLICATIONS**

**Gigabit PoE Network Deployment**

The HPOE-1200G provides the easiest way to power your Ethernet devices such as an IP Camera for a Wireless Access Point installed in a building. With 12 10/100/1000Base-T Gigabit Ethernet ports, the HPOE-1200G supports full 52V DC power for any remote IEEE 802.3af / IEEE 802.3at powered device (PD).

To further take advantage of the power system of your networking devices, the PoE Hub can power PoE IP phones and be used to build a VoIP telephony network system in the office. In addition, the PoE Hub can function with any third party IEEE 802.3af / 802.3at compliant devices installed 100 meters away.

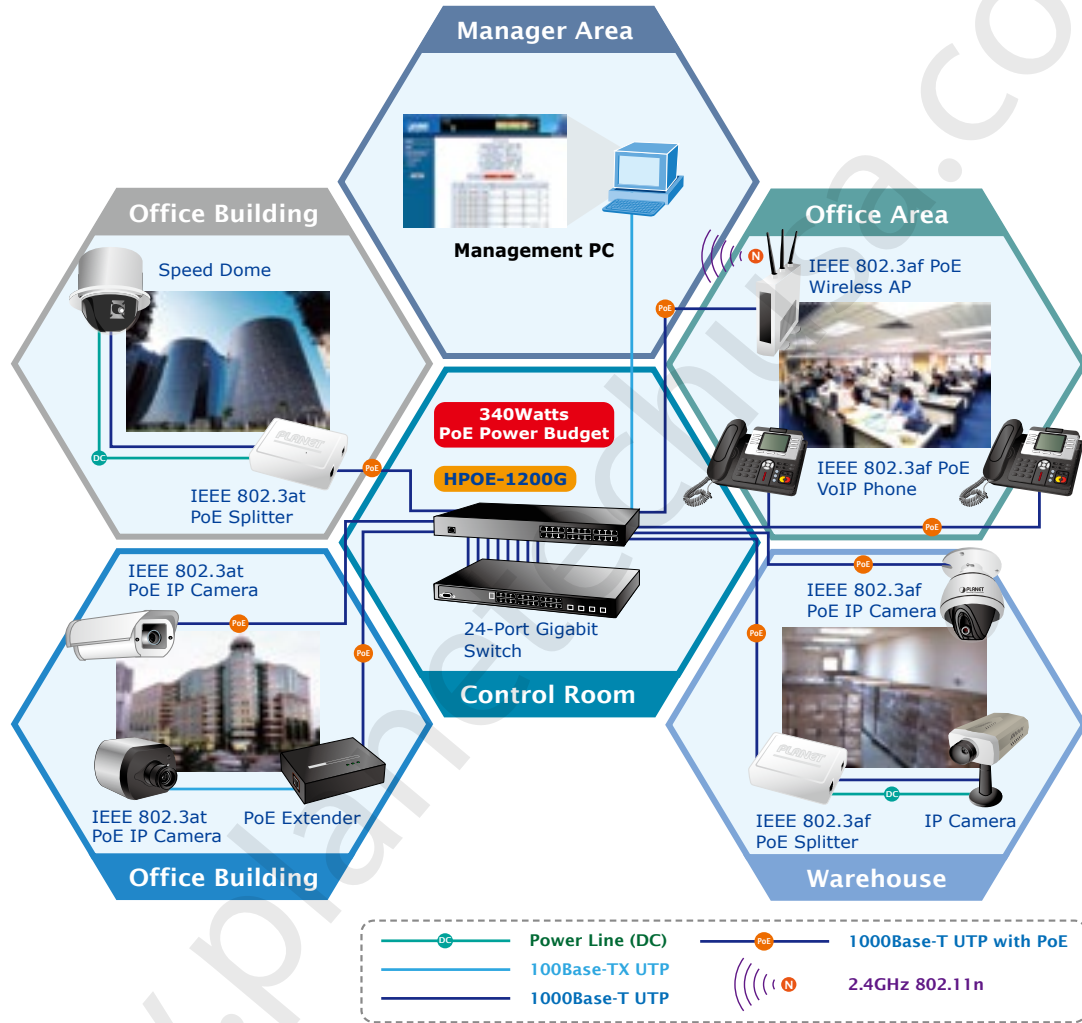


Figure: HPOE-1200G Application Topology

**SPECIFICATION**

Product	12-Port Gigabit IEEE 802.3at Power over Ethernet Injector Hub	
Model	HPOE-1200G	
<b>Hardware Specification</b>		
Interface	"Data" Input Ports	12 x RJ-45
	"Data+Power" Output Ports	12 x RJ-45
	Management Port	1 x RJ-45; 10/100Base-TX, auto-negotiation, auto-MDI / MDIX
Data Rate	10/100/1000Mbps	
LED	System: SYS Power x 1 (Green) Management Port x2: 10/100 (Green / Orange) Per PoE Port: PoE in use x 1 (Green) PoE Fail x 1 FAN Fail x 1	
Network Cable	10Base-T: 4-Pair UTP Cat. 5 up to 100m (328ft) 100Base-TX: 4-Pair UTP Cat. 5 up to 100m (328ft) 1000Base-T: 4-Pair UTP Cat. 5e, 6, up to 100m (328ft) EIA/TIA- 568 100-ohm STP (100m)	
Dimension (W x D x H)	440 x 300 x 44 mm (1U height)	
Weight	4.27kg	
Power Requirement	100-240V AC, 50/60 Hz	
Power Consumption	370 Watts max.	
Cooling	Fan x 2	
<b>Power over Ethernet</b>		
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	340 Watts	
Number of 802.3af PD Class 0, 1, 2, 3 can be powered	12	
Number of 802.3at PD Class 1, 2, 3 can be powered	12	
Number of 802.3at PD Class 0, 4 can be powered	10	
<b>Management</b>		
Management Interface	Web, PLANET Smart Discovery Lite	
PoE Management	Power Limit by Consumption, Classification and Total Limit	
	PoE Admin Mode	
	Per port Power Schedule	
	Per port Power Enable / Disable	
	Power Feeding Priority	
	Over Temperature Protection	
	Temperature Threshold	
	PoE Power Budget Usage Threshold	
Management Feature	Current per port usage and status	
	Total power consumption	
	System / Management functions setup	
Management Feature	Web firmware upgrade	
Management Feature	SNMP Trap for alarm notification of events	
<b>Standards Conformance</b>		
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 (Pre-standard)	
	IEEE 802.3af Power over Ethernet	
	RFC 768: UDP	
	RFC 791: IP	
	RFC 2068 HTTP	
	RFC 1157: SNMPv1	
	RFC 1902: SNMPv2c	
RFC 5424: Syslog		
Regulation Compliance	FCC Part 15 Class A, CE	
<b>Environment</b>		
Operating Temperature	0 ~ 50 Degree C	
Storage Temperature	-10 ~ 70 Degree C	
Humidity	5 ~ 95% (Non-condensing)	

**ORDERING INFORMATION**

HPOE-1200G	12-Port Gigabit IEEE 802.3at Power over Ethernet Injector Hub (340W)
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**RELATED POE PRODUCTS**

POE-151S	IEEE 802.3af Power Over Ethernet Splitter with 5VDC output (Mid-Span), (10/100Mbps)
POE-152S	IEEE 802.3af Power Over Ethernet Splitter with 5VDC output (End-Span), (10/100/1000Mbps)
POE-161S	IEEE 802.3at Gigabit High Power over Ethernet Splitter
ICA-H312	H.264 25-meter IR Internet Camera
ICA-H610	H.264 Indoor CCD Internet Camera
ICA-HM136	H.264 2Mega-Pixel 15M IR Vandal Proof Dome IP Camera
ICA-HM230	H.264 Mega-Pixel CMOS Pan/Tilt Internet Camera
ICA-HM240	H.264 Mega-Pixel Vandal Proof Pan/Tilt IP Camera
ICA-HM830	H.264 2Mega-Pixel Fish-Eye Panorama IP Camera
WNAP-1120PE	802.11n Wireless Access Point with PoE
WNAP-3000PE	54/108Mbps 802.11n Enterprise PoE Access Point
VIP-255PT	Multi-Language PoE IP Phone
VIP-156PE	802.3af PoE SIP Analog Telephone Adapter
VIP-560PE	Professional PoE IP Phone with Expansion Function
VIP-560PT	Professional PoE IP Phone

**PLANET Technology Corporation**  
Headquarters

11F., No.96, Minquan Rd., Xindian Dist.,  
New Taipei City 231, Taiwan (R.O.C.)  
Tel: 886-2-2219-9518  
Email: sales@planet.com.tw  
Fax: 886-2-2219-9528

**Versa Technology**  
Authorized North  
American Distributor

5224 Bell Court  
Chino, California 91710  
Tel: 888-229-3183  
Email: sales@versatek.com  
www.planetechusa.com



C-HPOE-1200G

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