12-Port Gigabit IEEE 802.3at High Power over Ethernet Injector Hub
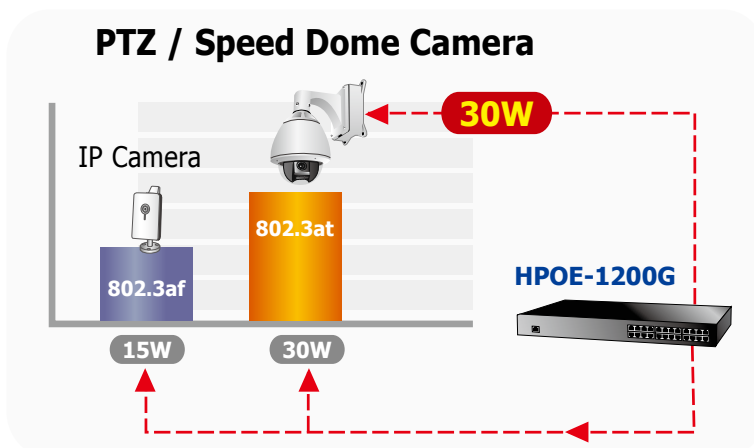
High Power PoE for Public Service PoE Applications

PLANET HPOE-1200G, the 12-Port Gigabit IEEE 802.3at PoE Web Management Injector Hub, features both IEEE 802.3af and High Power IEEE 802.3at High Power over Ethernet (PoE) that combine up to 30-watt power output and data per port over one CAT 5/5e/6 Ethernet cable. It is designed specifically to satisfy the growing demand of higher 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 amount of PoE power than the conventional 802.3af PoE PSE.

IEEE 802.3at PoE Standard Compliant

Till today, the IEEE 802.3af Power over Ethernet Standard has become popular yet the PoE demand still grows for increasing network-powered applications. With many critical applications increases, the demand of higher power appears. Hence, the IEEE 802.3at High Power over Ethernet standard is defined to allow delivery of maximum up to 30-watt input power to per PoE device. Compliant with IEEE 802.3at, the HPOE-1200G possesses stronger power capability than the existing 802.3af PoE PSE and is an ideal solution to fulfilling the high power requirements directly via the RJ-45 port interface.

- 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
- Reset button for system management

Power over Ethernet

- Complies with IEEE 802.3, IEEE 802.3at and IEEE 802.3af Power over Ethernet Mid-Span PSE
- Up to 12 IEEE 802.3at / 802.3af devices powered
- 360-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 powered device (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
- Per port 802.3at / 802.3af mode
- PoE port power feeding priority
- Per PoE port power limit
- PD classification detection
- Over temperature protection
- PoE temperature threshold
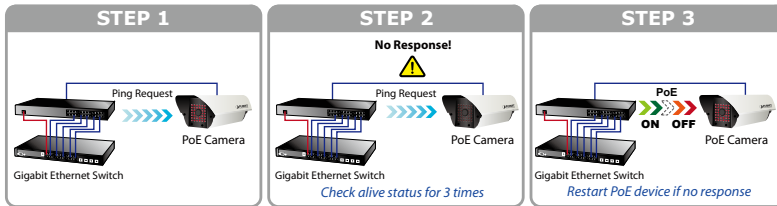- PoE power usage threshold
- PD alive-check

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
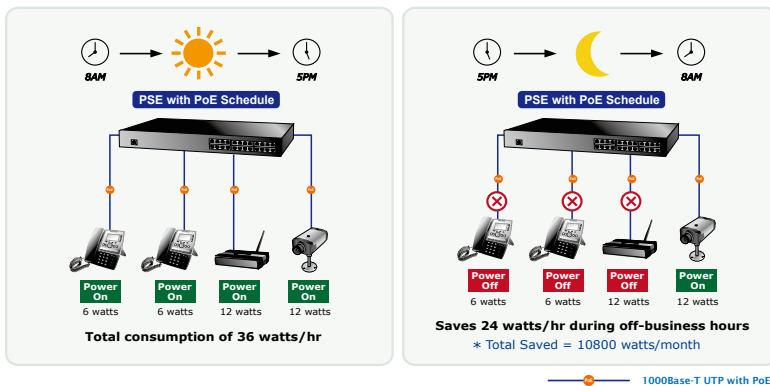
Intelligent Powered Device Alive Check

The HPOE-1200G can be configured to monitor connected PD (Powered Device) status in real time via ping action. Once the PD stops working and is without response, the HPOE-1200G will resume the PoE port power and bring the PD back to work. It will greatly enhance the network reliability through the PoE port resetting the PD's power source and reduce administrator management burden.

PoE PD Alive-checking

STEP 1	STEP 2	STEP 3
Ping Request / PoE Camera / Gigabit Ethernet Switch	No Response! / Ping Request / PoE Camera / Gigabit Ethernet Switch / Check alive status for 3 times	PoE ON OFF / PoE Camera / Gigabit Ethernet Switch / Restart PoE device if no response

PoE Schedule for Energy Saving

Under the trend of energy saving worldwide and contributing to environment protection on the Earth, the HPOE-1200G can effectively control the power supply besides its capability of giving high watts power. The "**PoE Schedule**" function provided by the HPOE-1200G 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.

8AM → 5PM
PSE with PoE Schedule
Power On 6 watts | Power On 6 watts | Power On 12 watts | Power On 12 watts
Total consumption of 36 watts/hr

5PM → 8AM
PSE with PoE Schedule
Power Off 6 watts | Power Off 6 watts | Power Off 12 watts | Power On 12 watts
Saves 24 watts/hr during off-business hours
✴ Total Saved = 10800 watts/month

●━━━● 1000Base-T UTP with PoE

Advanced Power Management

To facilitate power management, the HPOE-1200G comes with such powerful PoE management features 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 can send alert event logs when power usage reaches the defined threshold. The HPOE-1200G enables centralization of the power supply and optimizes the installation and power management of remote network devices; therefore, it eliminates costs for additional AC wiring and reduces installation time.
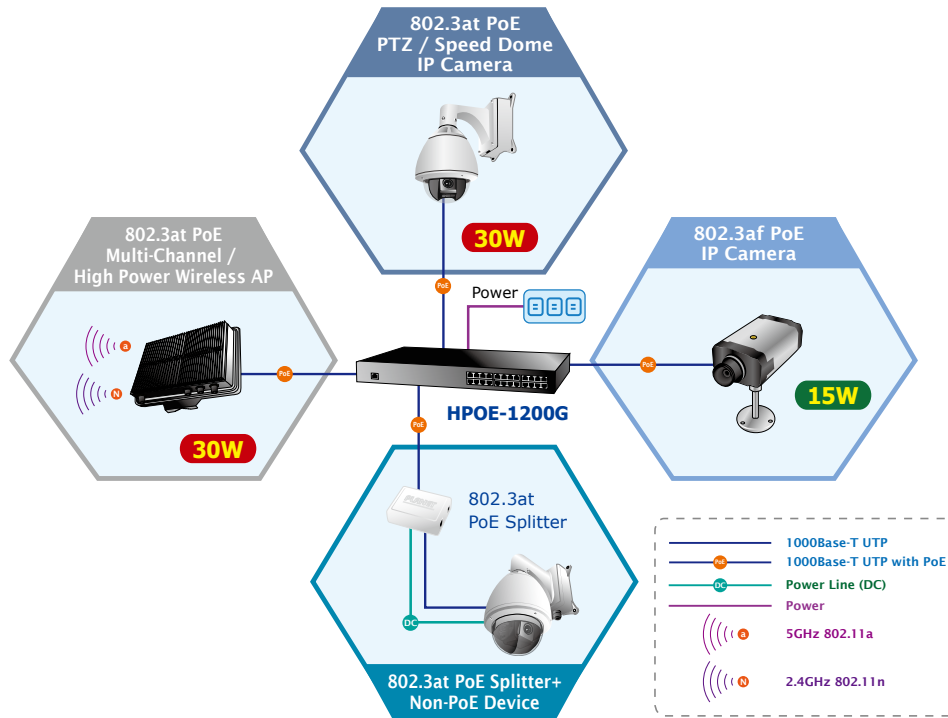
Hardware

- 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 High Power over Ethernet
- IEEE 802.3af Power over Ethernet
- RFC 768: UDP
- RFC 791: IP
- RFC 2068 HTTP
- RFC 1157: SNMP v1
- RFC 1902: SNMP v2c
- RFC 5424: Syslog

Quick and Easy PoE Network Deployment

The HPOE-1200G complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3af and IEEE 802.3at standards. With 12 10/100/1000Base-T Gigabit Ethernet ports, the HPOE-1200G supports 52V DC power for any remote 802.3af / 802.3at powered device (PD). Supporting total PoE power budget of 360 watts, the HPOE-1200G provides sufficient 15.4- / 30.8-watt PoE power up to 12 remote PD devices.

Easy Cabling Installation

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

Friendly Web Management Interface

To efficiently manage the powered devices, the HPOE-1200G provides simple Web management interface in which administrators can control the functions including port enable / disable, port priority, system configuration, user name / password changing and smart features for powered devices. The PoE injector hub can automatically detect the power status of each port and show messages on its Web management interface. These features also provide users a cost-effective way to manage the device via Internet whenever they are at work or at home.

Applications

Gigabit PoE Network Deployment

The HPOE-1200G 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 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 control the power system of your networking devices, the HPOE-1200G can directly co-work with network devices such as PoE IP phone to build VoIP telephony network in the office. Furthermore, the PoE hub can be directly connected to any third-party IEEE 802.3af / 802.3at compliant devices installed within 100 meters.

Manager Area
Management PC

Office Building
Speed Dome
IEEE 802.3at PoE Splitter
IEEE 802.3at PoE IP Camera

Office Area
IEEE 802.3af PoE Wireless AP
IEEE 802.3af PoE VoIP Phone

360-watt PoE Power Budget
HPOE-1200G
24-Port Gigabit Switch
Control Room

IEEE 802.3at PoE IP Camera   PoE Extender
Office Building

IEEE 802.3af PoE IP Camera
IEEE 802.3af PoE Splitter   IP Camera
Warehouse

Power Line (DC)   1000Base-T UTP with PoE
100Base-TX UTP
1000Base-T UTP   2.4GHz 802.11n

Specifications

Model	HPOE-1200G
Hardware	
Hardware Version	2
Interface — "Data" Input Ports	12 x RJ-45
Interface — "Data+Power" Output Ports	12 x RJ-45
Interface — 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 x 2: 10/100 (green / orange)
	Per PoE port: PoE in use x 1 (green)
	PoE failure x 1
	FAN failure 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)
Dimensions (W x D x H)	440 x 300 x 44 mm (1U height)
Weight	4.27kg
Power Requirements	100-240V AC, 50/60 Hz, 6A
Power Consumption	400 watts max.
Cooling	Fan x 2
Power over 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	360 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	12
Management	
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
	Current per port usage and status
	Total power consumption
Management Feature	System / management functions setup
	Web firmware upgrade
	SNMP trap for alarm notification of events
Standards Conformance	
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 High Power over Ethernet
	IEEE 802.3af Power over Ethernet
	RFC 768: UDP
	RFC 791: IP
	RFC 2068 HTTP
	RFC 1157: SNMP v1
	RFC 1902: SNMP v2c
	RFC 5424: Syslog
Regulation Compliance	FCC Part 15 Class A, CE
System Integration	
Operating Temperature	0 ~ 50 degrees C
Storage Temperature	-10 ~ 70 degrees C
Humidity	Operating: 5 ~ 95% (Non-condensing)
	Storage: 5 ~ 95% (Non-condensing)

Ordering Information

HPOE-1200G	12-Port Gigabit IEEE 802.3at High Power over Ethernet Injector Hub (360W)

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 Fisheye 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
ICF-1700	Touch Screen Internet Multimedia Phone
VIP-256PT	802.3af PoE SIP IP Phone
VIP-360PT	Business PoE IP Phone
VIP-361PE	Professional PoE IP Phone (5-Line)
VIP-560PT	Professional PoE IP Phone

HPOE-1200G