

# 8-Port Gigabit 802.3bt PoE++ Managed Injector Hub (400 watts)

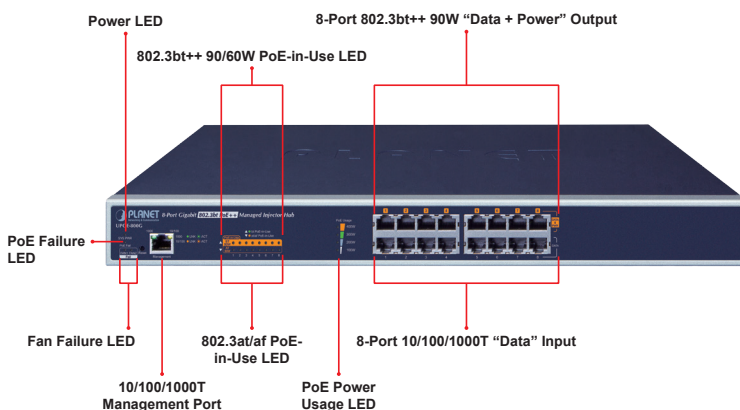


## Ready to Deploy Next Generation IEEE 802.3bt PoE++ Standard

PLANET's newly-improved UPOE-800G, a high-density, rack-mountable managed 802.3bt PoE++ Managed Injector Hub, features eight 10/100/1000BASE-T **90-watt 802.3bt type-4 PoE++ injector ports** with **PLANET intelligent PoE** functions through web user interface for remote management. With a total PoE budget of 400 watts, it delivers ultra PoE power over Ethernet UTP cables which allow data and power to transmit simultaneously to a remote 802.3bt/at powered device (PD).



The UPOE-800G provides a quick, safe and cost-effective 802.3bt PoE++ network solution for small businesses and enterprises. It is designed to perfectly upgrade an existing network infrastructure to 802.3bt PoE++ network system without replacing the existing Ethernet switches. It also enables centralization of the power supply and optimizes the installation and power management of remote network devices.



## Interface

- 16-port RJ45
  - 8-port 10/100/1000Mbps “Data input”
  - 8-port 10/100/1000Mbps “Data + Power output”
- One 10/100/1000BASE-T management port

## 802.3bt Power over Ethernet

- Complies with IEEE 802.3bt Power over Ethernet Plus Plus
- Backward compatible with IEEE 802.3at Power over Ethernet Plus
- Up to 8 ports of IEEE 802.3at/IEEE 802.3bt PoE devices powered
- 8 PoE ports with built-in 802.3bt type-4 PoE 90W or Ultra PoE 95-watt injector function
- All PoE ports support 802.3at end-span/mid-span PoE 36W injector function
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters

## PoE Management

- Per port PoE power schedule
- PoE function enable/disable
- Per port PoE function enable/disable
- Per port PoE operation mode selection
- PoE port power feeding priority
- PD classification detection
- Over temperature protection
- PD alive check
- PoE schedule

## 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 v1, v2c and v3 for system status monitoring
- SNMP trap for alarm notification of events
- System log/remote syslog

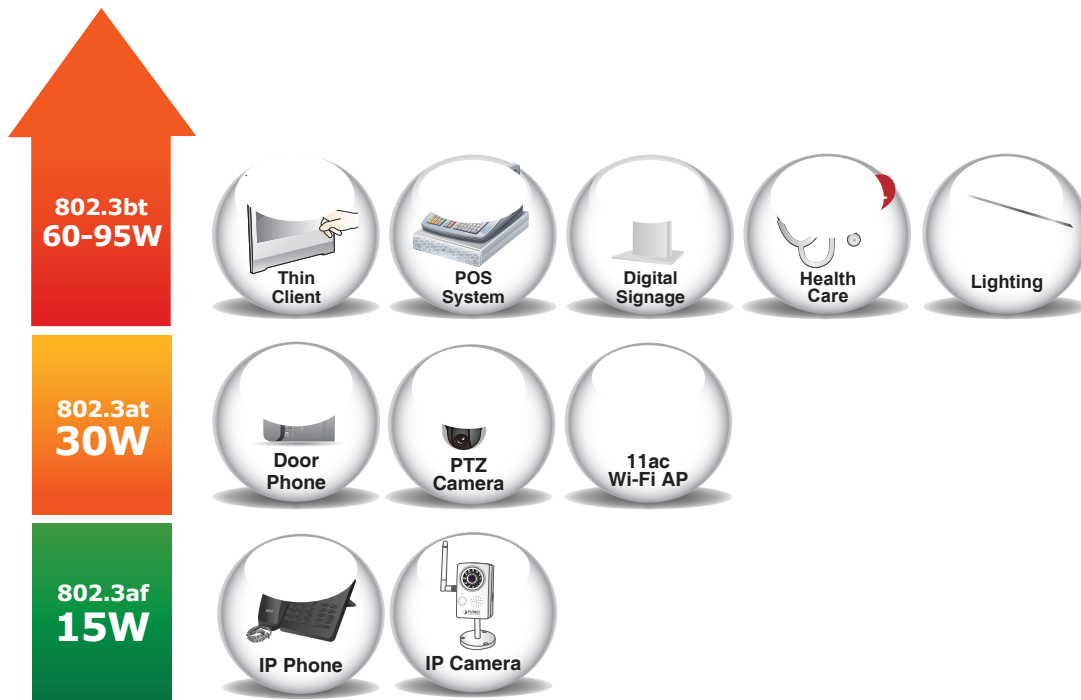
**802.3bt PoE++ – 60~95-watt Power over 4-pair UTP Solution**

As the UPOE-800G adopts the IEEE 802.3bt PoE++ standard and PoH technology, it is capable to source up to **95 watts** of power by using all the four pairs of standard Cat5e/6 Ethernet cabling to deliver power and full-speed data to each remote PoE compliant powered device (PD). It possesses triple amount of power capability than the conventional 802.3at PoE+ and is an ideal solution to satisfy the growing demand for higher power consuming network PDs, such as:

- PoE PTZ speed dome cameras
- Network devices
- Thin clients
- AIO (all-in-one) touch PCs, point of sale (POS) and information kiosks
- Remote digital signage displays
- PoE lightings

**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
- LED indicators for PoE power usage status (watts)



**Advanced PoE Power Output Mode Management**

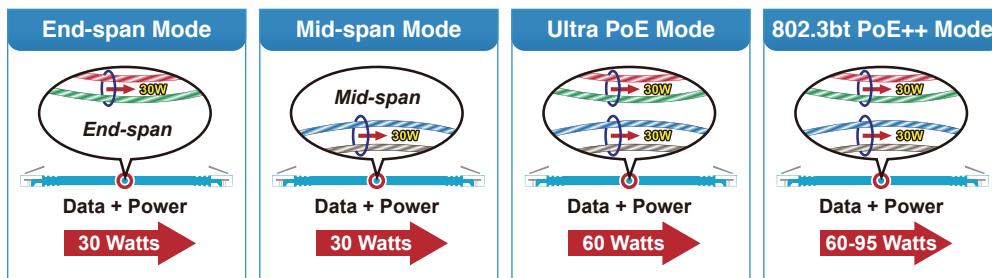
To meet the demand of various powered devices consuming stable PoE power, the UPOE-800G supports rich PoE operation modes including 90-watt 802.3bt type-4 PoE++ mode, 95-watt PoH (Power over HD-BASE-T) mode and 4-pair force mode to solve the incompatibility of non-standard 4-pair PoE PDs in the field.

PoE Watts	PoE Operation Mode	Power Output Mode
95W	UPoE/PoH	(Pins 1, 2, 3, 6 + Pins 4, 5, 7, 8)
90W	802.3bt PoE++	(Pins 1, 2, 3, 6 + Pins 4, 5, 7, 8)
60W	Force Power	(Pins 1, 2, 3, 6 + Pins 4, 5, 7, 8)
36W	End-span PoE	(Pins 1, 2, 3, 6)
36W	Mid-span PoE	(Pins 4, 5, 7, 8)

### Selectable End-span/Mid-span/UPoE 802.3bt PoE + + Power Inline Mode

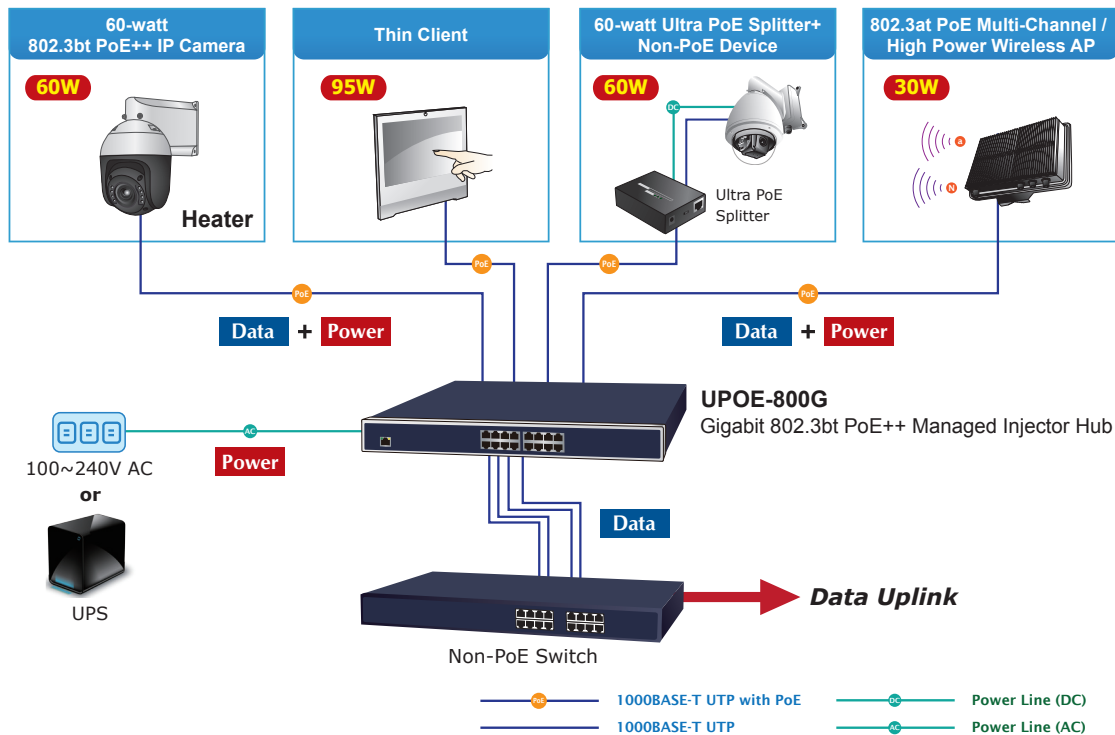
Port	Description	PoE Function	Schedule	Power Mode	Porce Power	Priority	Device Class	Current Used[mA]	Powered Used [W]	Power Limit [W]
1		Enable	Profile 1	BT	Off	High	--	0	0	90
2		Enable	Profile 1	BT	Off	High	--	0	0	90
3		Enable	Profile 1	BT	Off	High	--	0	0	90

Midspan  
Endspan  
UPOE  
BT



#### Quick and Easy 802.3bt/at PoE Network Deployment

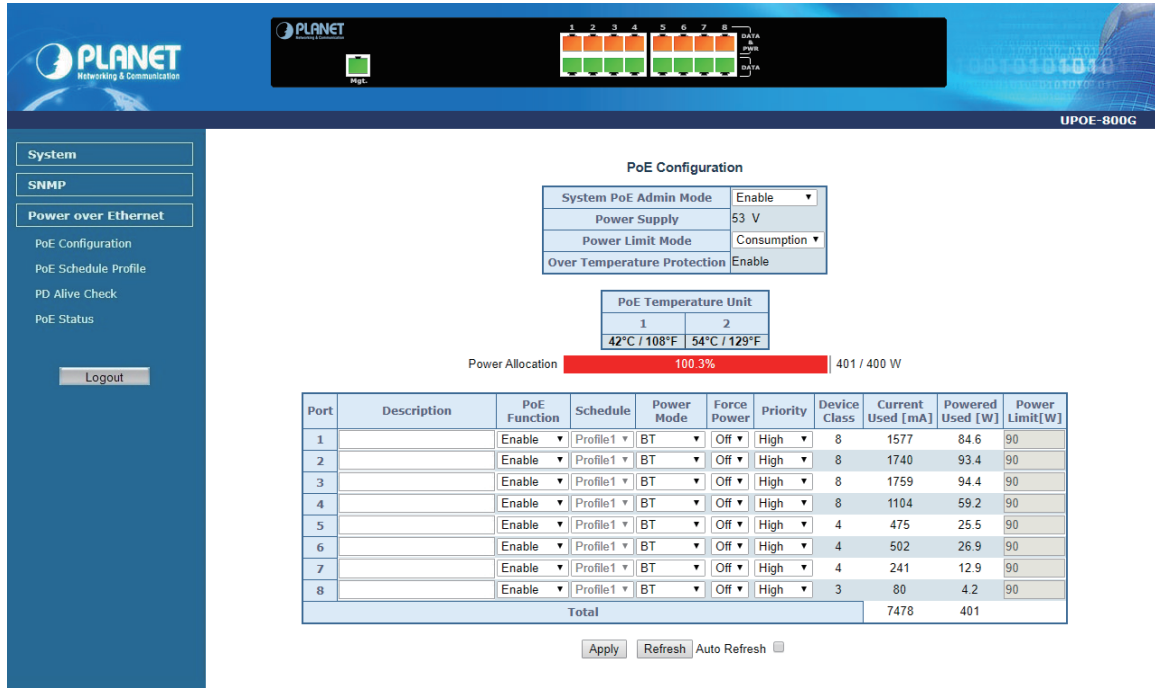
The UPOE-800G is installed between a regular Ethernet Switch and the PDs. There are totally 16 RJ45 STP ports on the front panel of the UPOE-800G, of which the 8 ports are on the lower stack functioned as "Data input" while the other 8 ports are on the upper stack functioned as "PoE (Data and Power) output". Both power and data are transferred simultaneously over the UTP cables to various 802.3bt/at PDs without affecting the existing network performance and functions.



With data and Power over Ethernet from one unit, the UPOE-800G can reduce power cable deployment and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place.

**User-friendly Web Management Interface**

To efficiently manage the powered devices, the UPOE-800G provides remote **Web management interface** in which administrators can control the system and PoE functions for powered devices. 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.



**PoE Configuration**

System PoE Admin Mode	Enable
Power Supply	53 V
Power Limit Mode	Consumption
Over Temperature Protection	Enable

**PoE Temperature Unit**

1	2
42°C / 108°F	54°C / 129°F

Power Allocation: 100.3% | 401 / 400 W

Port	Description	PoE Function	Schedule	Power Mode	Force Power	Priority	Device Class	Current Used [mA]	Powered Used [W]	Power Limit[W]
1		Enable	Profile1	BT	Off	High	8	1577	84.6	90
2		Enable	Profile1	BT	Off	High	8	1740	93.4	90
3		Enable	Profile1	BT	Off	High	8	1759	94.4	90
4		Enable	Profile1	BT	Off	High	8	1104	59.2	90
5		Enable	Profile1	BT	Off	High	4	475	25.5	90
6		Enable	Profile1	BT	Off	High	4	502	26.9	90
7		Enable	Profile1	BT	Off	High	4	241	12.9	90
8		Enable	Profile1	BT	Off	High	3	80	4.2	90
Total								7478	401	

Buttons: Apply, Refresh, Auto Refresh

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

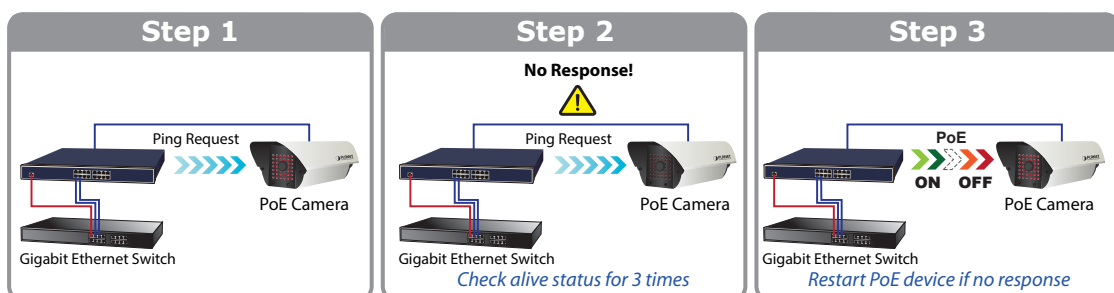
As it is the managed PoE++ Injector Hub for VoIP, wireless and surveillance networks, the UPOE-800G features the following special PoE management functions:

- PoE schedule
- PD alive check
- Scheduled power recycling
- BT, UPoE, end-span, mid-span or force mode selectable in PoE Power Output Mode
- PoE usage monitoring
- Over temperature protection

**Intelligent Powered Device Alive Check**

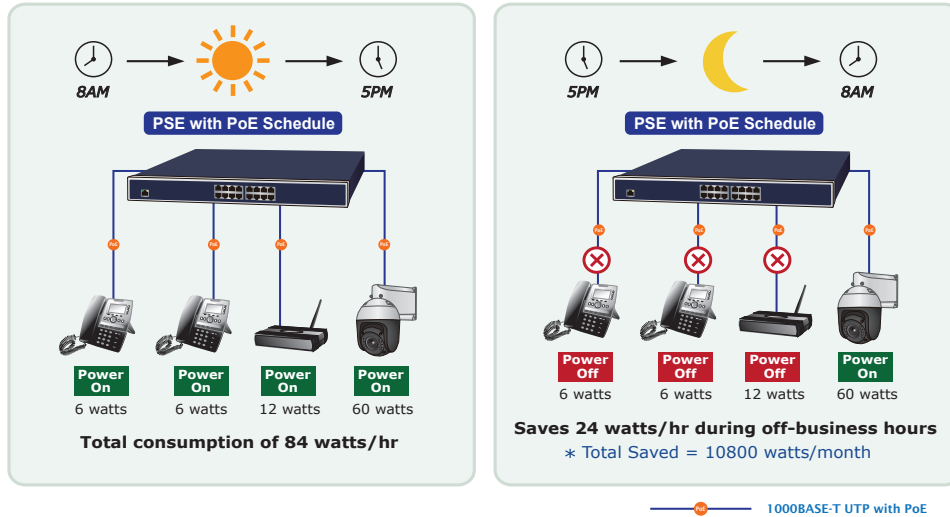
PLANET's Managed PoE products adopt not only Power over Ethernet technology, but also automated PD monitoring and real-time PoE status. The UPOE-800G can be configured to monitor connected PD's status in real time via ping action through the uplinked Ethernet switch. Once the PD stops working and responding, the UPOE-800G 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 Check**



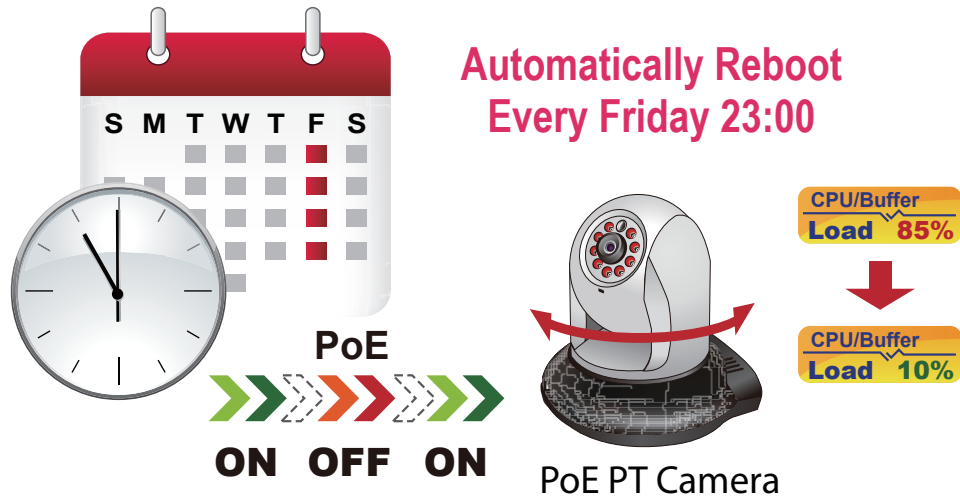
**PoE Schedule for Energy Savings**

Under the trend of energy saving worldwide and contributing to environmental protection on the Earth, the UPOE-800G 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. It also increases security by powering off PDs that should not be in use during non-business hours.



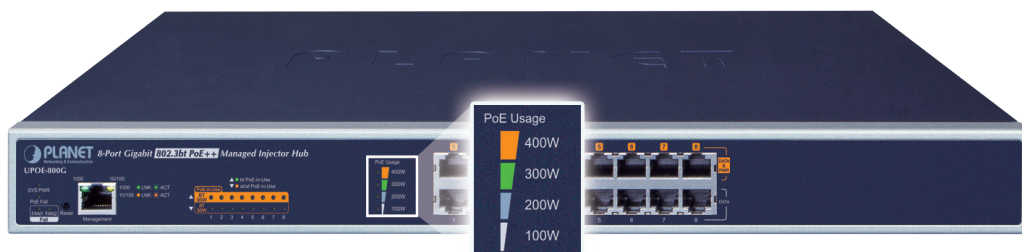
**Scheduled Power Recycling**

The UPOE-800G allows each of the connected PoE IP cameras or PoE wireless access points to reboot at a specific time each week. Therefore, it will reduce the chance of IP camera or AP crash resulting from buffer overflow.



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

The UPOE-800G 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 UPOE-800G has four green LEDs indicating 100W, 200W, 300W and 400W of PoE power usage.





*PoE Usage Monitoring*

Via the power usage chart in the web management interface, the UPOE-800G enables the administrator to monitor the status of the power usage of the connected PDs in real time.

*High Power Budget for PoE Extension*

With up to 95-watt PoE output capability, the UPOE-800G 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*

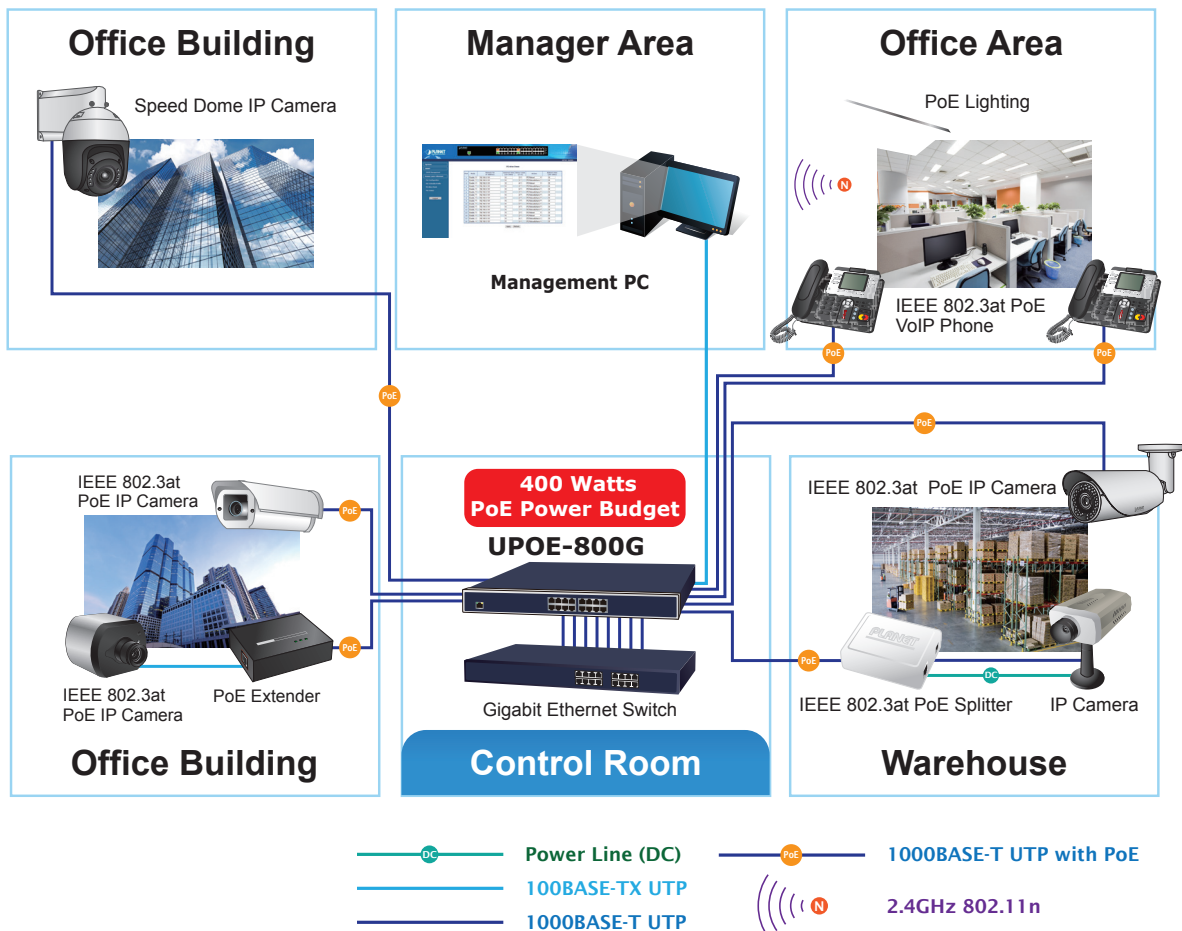
The UPOE-800G features a low noise design and an effective ventilation system. It supports the smart fan technology that automatically controls the speed of the built-in fan to reduce noise and maintain the temperature of the 802.3bt PoE++ Managed Injector Hub for optimal power output capability. The UPOE-800G is able to operate reliably, stably and quietly in any environment without affecting its performance.

## Applications

*Gigabit PoE++ and PoE+ Network Deployment*

The UPOE-800G 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 8 10/100/1000BASE-T Gigabit Ethernet ports, the UPOE-800G supports full 54V DC power for any remote IEEE 802.3at/IEEE 802.3bt powered device (PD).

To control the power system of your networking devices, the UPOE-800G can directly co-work with network devices such as PoE IP phone to build VoIP telephony network in the office. The 802.3bt PoE++ injector hub can be directly connected to any third-party IEEE 802.3bt and 802.3at PoE compliant devices installed within 100 meters. Furthermore, the UPOE-800G 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.



## Specifications

Product		UPOE-800G
<b>Hardware</b>		
Interface	"Data" Input Ports	8 x RJ45
	"Data + Power" Output Ports	8 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) Fan Failure x 2 (red) Management port x 2: 1000 (green), 10/100(orange) Per PoE Port: 802.3bt/UPoE PoE-in-use x 1 (green) 802.3at PoE-in-use x1 (orange) PoE Power Usage LED x4 (green)	
Power Requirements	100-240V AC, 50/60 Hz, 6.5A	
Power Consumption	520 watts (max.)/1774BTU	
Ventilation	Fan x 3	
Dimensions (W x D x H)	440 x 300 x 44.5 mm, 1U height	
Enclosure	Metal	
Weight	4.2kg	
<b>Power over Ethernet</b>		
PoE Standard	802.3bt PoE++ PSE Backward compatible with IEEE 802.3at PoEPSE	
PoE Power Supply Type	<ul style="list-style-type: none"> <li>■ 802.3bt</li> <li>■ UPoE</li> <li>■ End-span</li> <li>■ Mid-span</li> <li>■ Force</li> </ul>	
PoE Power Output	Per port 54V DC <ul style="list-style-type: none"> <li>■ 802.3bt mode, Port-1 to Port-8: maximum 90 watts</li> <li>■ UPoE mode, Port-1 to Port-8: maximum 95 watts</li> <li>■ Force mode, Port-1 to Port-8: maximum 60 watts</li> <li>■ End-span mode: maximum 36 watts</li> <li>■ Mid-span mode: maximum 36 watts</li> </ul>	
Power Pin Assignment	<ul style="list-style-type: none"> <li>■ 802.3bt: 1/2(-), 3/6(+), 4/5(+), 7/8(-)</li> <li>■ UPoE: 1/2(-), 3/6(+), 4/5(+), 7/8(-)</li> <li>■ End-span: 1/2(-), 3/6(+)</li> <li>■ Mid-span: 4/5(+), 7/8(-)</li> </ul>	
PoE Power Budget	400 watts (max.)	
Number of 90W 802.3bt Type-4 PDs	4	
Number of 60W 802.3bt Type-3 PDs	6	
Number of 802.3at PDs	8	
<b>Management</b>		
Management Interface	Web, PLANET Smart Discovery Utility	
Management Feature	Setup of system/management functions Web firmware upgrade SNMP trap for alarm notification of events	
PoE Management	Power limit by consumption PoE admin mode Per port power schedule Per port power enable/disable Per Port PoE operation mode selection Power feeding priority Over temperature protection Current per port usage and status Total power consumption PD alive check Scheduled power recycling	
<b>Standards Conformance</b>		
Regulatory Compliance	FCC Part 15 Class A, CE	

Standards Compliance	<p>IEEE 802.3 10BASE-T Ethernet          IEEE 802.3u 100BASE-TX Fast Ethernet          IEEE 802.3ab 1000BASE-T Gigabit Ethernet          IEEE 802.3af Power over Ethernet          IEEE 802.3at Power over Ethernet Plus          IEEE 802.3bt Power over Ethernet Plus Plus          RFC 768: UDP          RFC 791: IP          RFC 2068 HTTP          RFC 1157: SNMP v1          RFC 1902: SNMP v2c          RFC 2273: SNMPv3          RFC 5424: Syslog</p>
Network Cable	<p>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)</p>
<b>Standards Conformance</b>	
Operating	<p>Temperature: 0 ~ 50 degrees C          Relative Humidity: 5 ~ 90% (non-condensing)</p>
Storage	<p>Temperature: -10 ~ 70 degrees C          Relative Humidity: 5 ~ 90% (non-condensing)</p>

## Ordering Information

UPOE-800G	8-Port Gigabit 802.3bt PoE++ Managed Injector Hub (400 watts)
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