4-Port Multi-Gigabit 802.3bt PoE++ Injector Hub (160 Watts)

Physical Ports

- **Four 10/100/1G/2.5G/5GBASE-T** Gigabit RJ45 interfaces
  – 4-port **data + power input**
- **Four 10/100/1G/2.5G/5GBASE-T** Gigabit RJ45 interfaces
  – 4-port **data + power output**

Power Information

- 1 DC power jack for requires +52-54V DC power input
- 100~240V AC, 50/60Hz, 3.33A universal power supply adapter with DC 52V~54V power output

Power over Ethernet

- 4-port data + power output
- Complies with 802.3bt Power over Ethernet Plus Plus end-span and mid-span PSE
- Backward compatible with IEEE 802.3at Power over Ethernet Plus end-span/mid-span PSE
- Up to 4 IEEE 802.3at/IEEE 802.3bt PoE devices powered
- 4 PoE ports with built-in 90-watt 802.3bt PoE++ type 4 PSE or 95-watt PoH PoE injector function
- 4 PoE ports support 802.3at end-span/mid-span PoE+ 36-watt injector function
- DIP switch for 802.3bt, PoH and Force mode selection
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Forwards both Ethernet **data** and **PoE** power to remote device over a 100-meter (328ft.) distance

LED Indicators

- LED indicators for power LED
- LED indicators for per PoE port operation status
- LED indicators for PoE Usage status (50W,100W and 160W)

Hardware

- Metal case
- Wall-mount design and DIN-rail kit (optional)
- 0 to 50 degrees C operating temperature
- FCC Part 15 Class A, CE
- Plug and Play installation

Compact and Robust 802.3bt PoE++ Network Solution

PLANET UPOE-400 4-Port Multi-Gigabit 802.3bt PoE++ Injector Hub features four **10/100/1G/2.5G/5GBASE-T 90-watt 802.3bt type-4 PoE++ injector ports**. With a total PoE budget of 160 watts, it delivers 802.3bt 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-400 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 and also enables centralization of the power supply.

802.3bt PoE++ Meets High Power Demands of Powered Devices

As the UPOE-400 adopts the IEEE 802.bt PoE++ standard and PoH technology, it is capable to source up to **90 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 PD. It possesses triple amount of power capacity, when compared with that of the conventional 802.3at PoE+. It 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

802.3bt 60-95W — Thin Client, POS System, Digital Signage, Health Care, Lighting

802.3at 30W — Door Phone, PTZ Camera, 11ac Wi-Fi AP
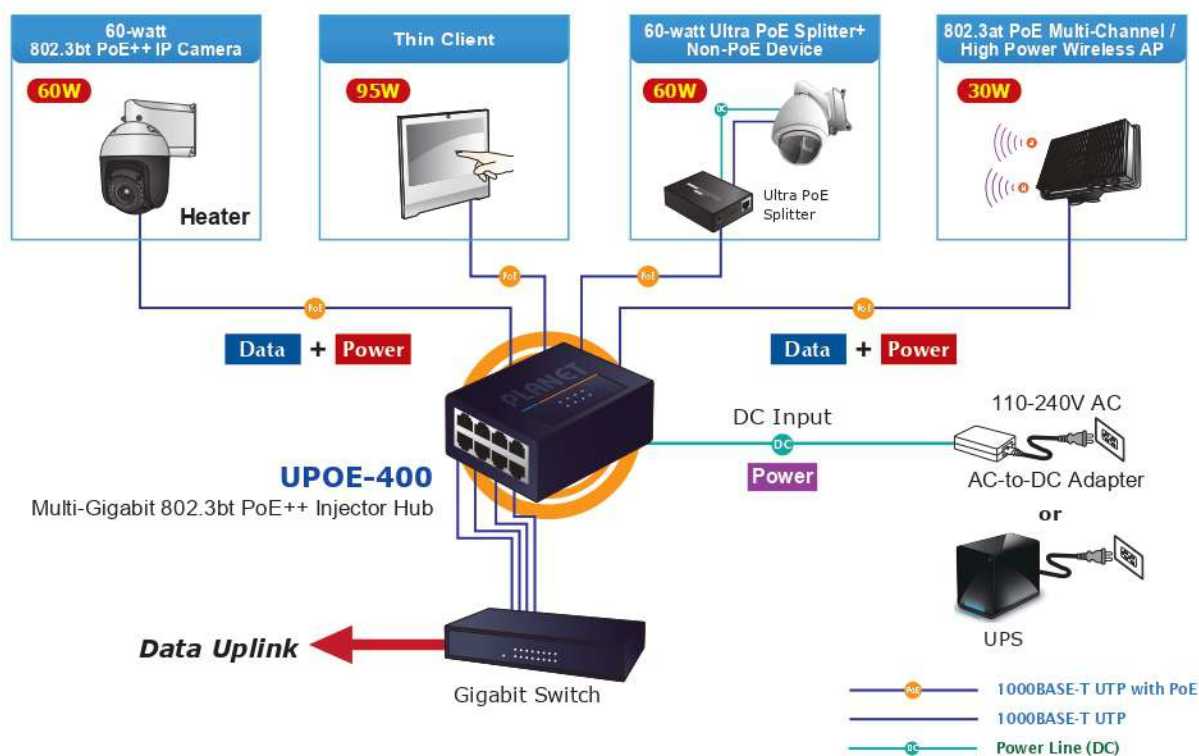
802.3af 15W — IP Phone, IP Camera

Standard Compliance

- IEEE 802.3 Ethernet
- IEEE 802.3u Fast Ethernet
- IEEE 802.3ab Gigabit Ethernet
- IEEE 802.3bz 2.5G/5GBASE-T
- IEEE 802.3af Power over Ethernet
- IEEE 802.3at Power over Ethernet Plus
- IEEE 802.3bt Power over Ethernet Plus Plus

Quick and Easy 802.3bt/at PoE Network Deployment

The UPOE-400 is installed between a regular Ethernet Switch and the PDs. Four ports are network (Ethernet) ports for data input while the other four ports are PoE++ ports for 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-400 can reduce power cable deployment and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place.
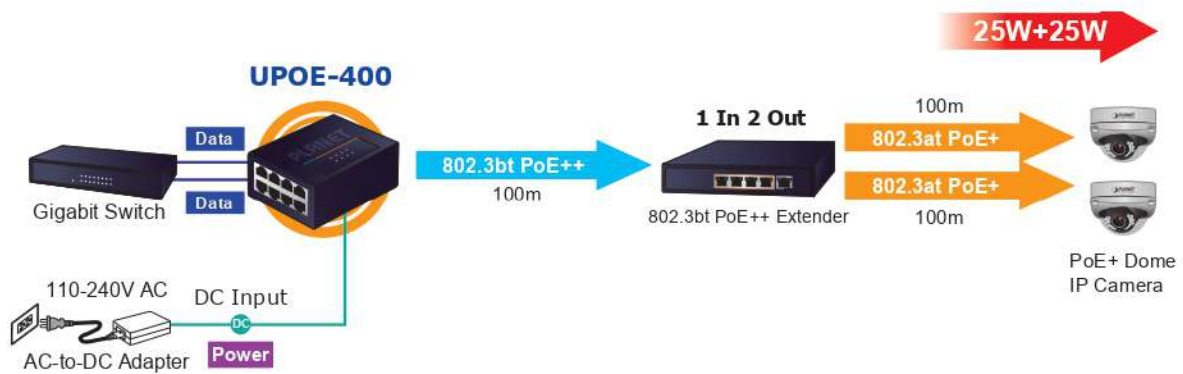

60-watt 802.3bt PoE++ IP Camera — 60W — Heater

Thin Client — 95W

60-watt Ultra PoE Splitter+ Non-PoE Device — 60W — Ultra PoE Splitter

802.3at PoE Multi-Channel / High Power Wireless AP — 30W

Data + Power

Data + Power

UPOE-400
Multi-Gigabit 802.3bt PoE++ Injector Hub

DC Input

Power

110-240V AC

AC-to-DC Adapter

or

UPS

Data Uplink

Gigabit Switch

1000BASE-T UTP with PoE
1000BASE-T UTP
Power Line (DC)

Intelligent LED Indicator for Power Input and Real-time PoE Usage

The UPOE-400 helps users to monitor the current status of power input and PoE power usage easily and efficiently via its advanced LED indication. The **"Power LED"** allows user to know the status of DC power input. The **"PoE Usage"** displayed on the front panel of the UPOE-400 has three amber LED indicators of different power usages indicating **50W**, **100W** and **160W**. Via the power usage LED, the UPOE-400 enables the administrator to monitor the status of the power usage of the connected PDs in real time.

PoE-in-Use
1   2   3   4
PoE Usage
50W 100W 160W PWR
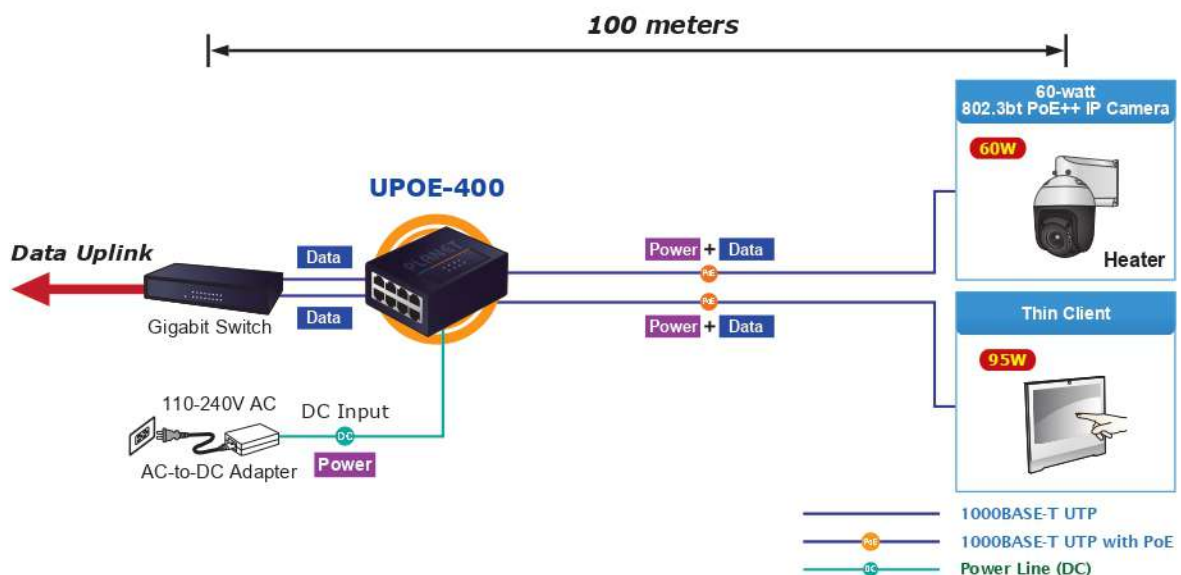
High Power Budget for PoE Extension

With up to 90-watt PoE output capability, the UPOE-400 can extend much longer distance by using PLANET PoE Extender for powering up the PoE PD which can be installed over a distance of more than 100 meters.

25W+25W

UPOE-400

Data
Data

Gigabit Switch

802.3bt PoE++
100m

1 In 2 Out

802.3bt PoE++ Extender

100m
802.3at PoE+
802.3at PoE+
100m

PoE+ Dome
IP Camera

110-240V AC   DC Input
DC
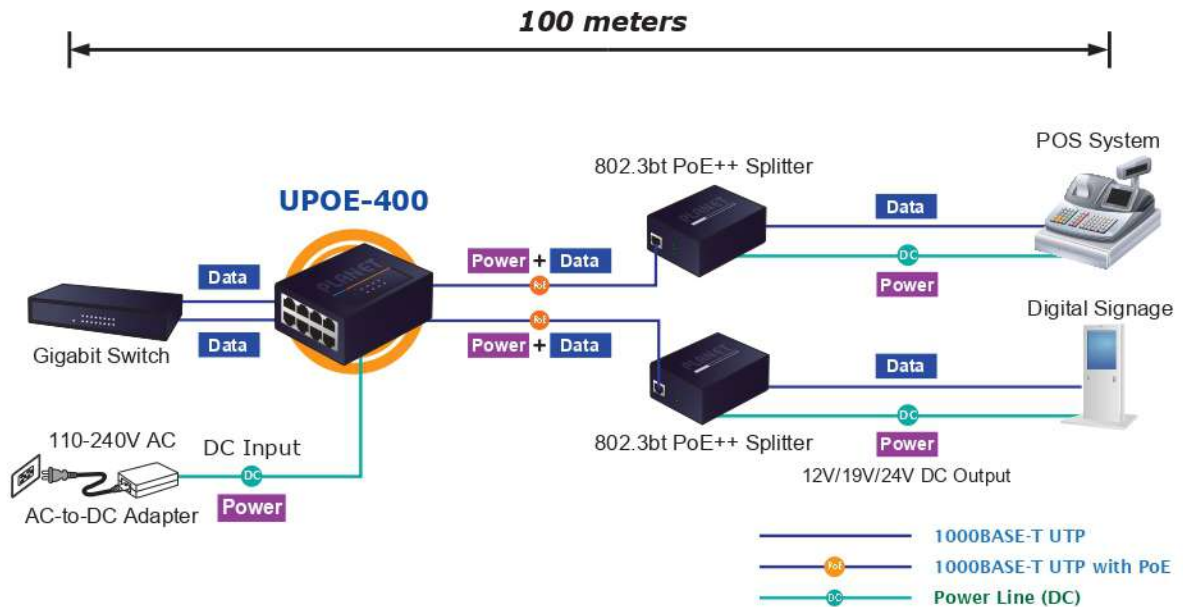AC-to-DC Adapter   **Power**

Applications

IEEE 802.3bt PoE++ Standard

Meeting the IEEE 802.3bt Power over Ethernet standard, the UPOE-400 can directly connect and inject power via RJ45 Ethernet cable to any IEEE 802.3bt end-nodes like PoE PTZ speed dome cameras, thin clients, all-in-one touch PCs, point of sale (POS), information kiosks, remote digital signage displays and PoE lightings.

100 meters

UPOE-400

Data Uplink

Data
Data

Gigabit Switch

Power + Data
Power + Data

60-watt 802.3bt PoE++ IP Camera
60W
Heater

Thin Client
95W

110-240V AC   DC Input
DC
AC-to-DC Adapter   **Power**

1000BASE-T UTP
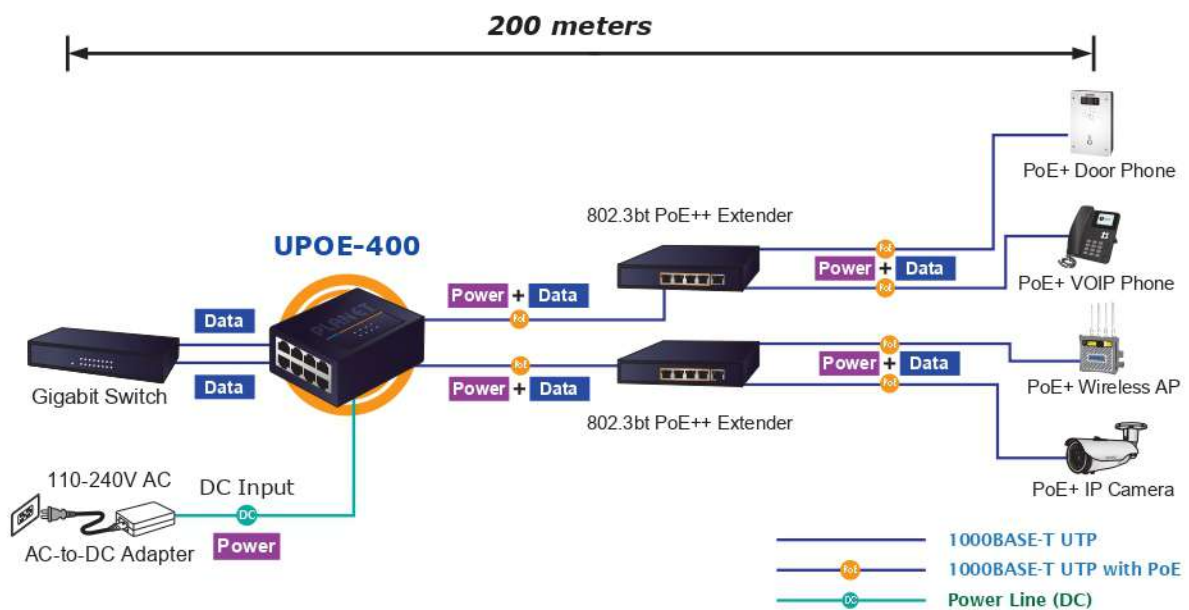1000BASE-T UTP with PoE
Power Line (DC)

Designed for High Power Consuming Network Devices

For a place which is hard to find the power inlet, the UPOE-400 and POE-173S can operate as a pair to provide the easiest way to power your high power consuming Ethernet devices, such as PTZ IP cameras, color touch-screen voice over IP (VoIP) telephones, and multi-channel wireless LAN access points installed on the top of the building or in enterprise office or home, as well as thin clients, all-in-one touch PCs, point of sale (POS), information kiosks and remote digital signage displays.
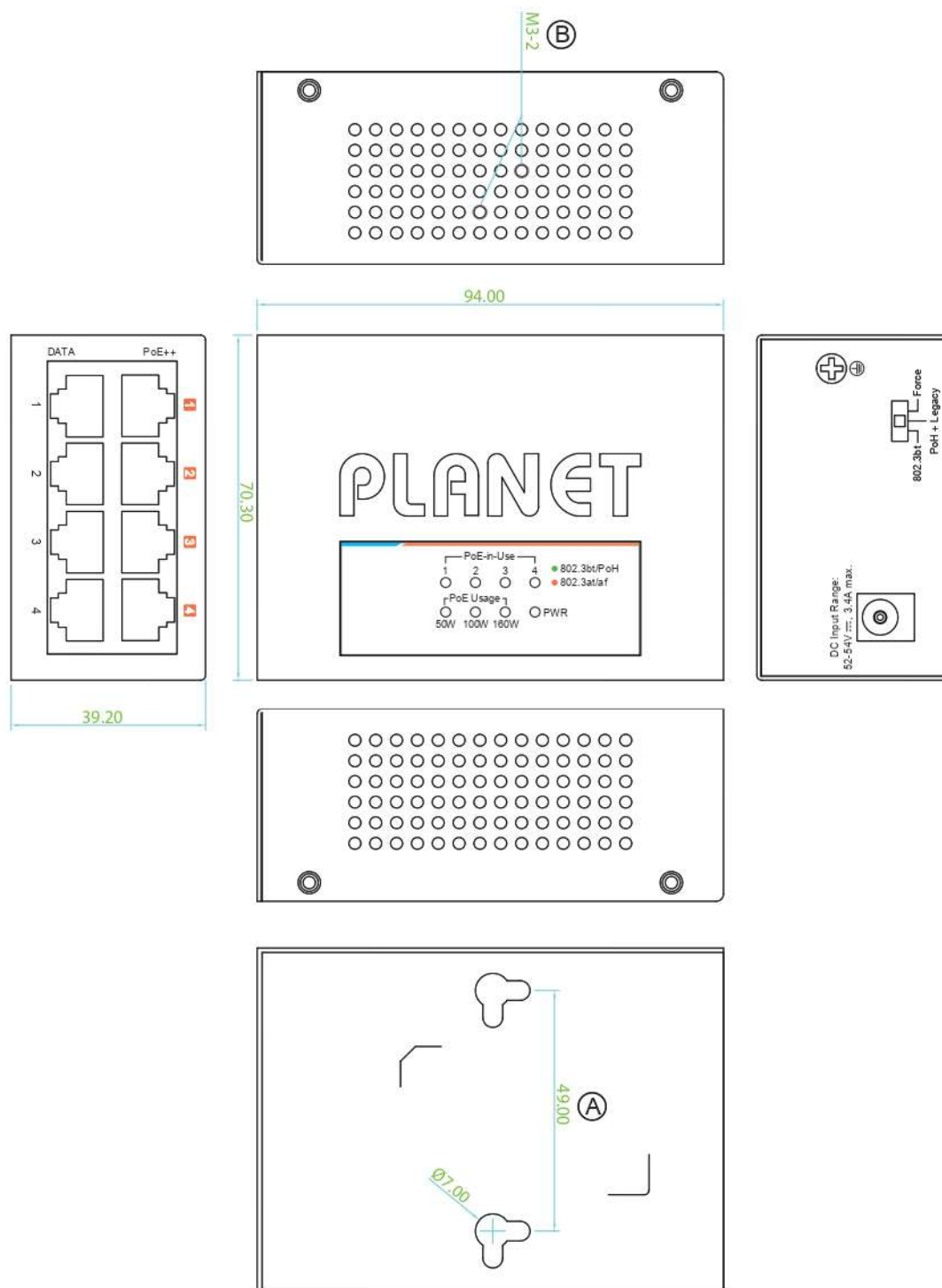

Network Distance Extension

Is 100-meter cable long enough for a wide range of IP surveillance deployments? The answer is certainly not. To achieve the benefits of IP surveillance and also the long-distance IP camera distribution, the UPOE-400 and PLANET POE-E304 PoE Extender can be a quick and cost-effective option. In the simplest application, the PoE Extender enables a PoE IP camera to be installed up to 200 meters away from the UPOE-400. The UPOE-400 delivers PoE power over the first 100 meters to the PoE Extender over UTP cables, and then the PoE Extender forwards the Ethernet data and remaining PoE power to the remote PoE IP cameras.

Specifications

Model	UPOE-400
Hardware Specifications	
Copper Ports — "Data" Input Ports	4 x RJ45
Copper Ports — "Data + Power" Output Ports	4 x RJ45

LED Indicator	**System:**
	  Power (**Green**)
	PoE-in-Use:
	  802.3bt/PoH (**Green**)
	  802.3at/af (**Orange**)
	PoE Usage:
	  50W/100W/160W (**Amber**)

Data Rate	10/100/1000/2500/5000Mbps
Power Requirements	DC 52~54V

Power Consumption (Ethernet Full Loading)	**System ON without loading**
	  AC 110V: 0.4watts/1.3BTU
	  AC 220V: 0.3watts/1BTU
	Full loading with PoE
	  AC 110V: 242watts/825BTU
	  AC 220V: 236watts/805BTU

DIP Switch	■ 802.3bt:90W PoE Output ■ PoH + Legacy: 95W PoE Output ■ Force: 60W PoE Output
Dimensions (W x D x H)	94 x 70.3 x 39.2mm
Weight	275g
Enclosure	Metal case
Installation	Wall-mount and DIN-rail kit (optional)
Network Cable	Twisted-pair cable up to 100 meters (328ft) 10BASE-T: 4-pair UTP Cat. 3, 4, 5, 5e, 6 100BASE-TX: 4-pair UTP Cat. 5, 5e, 6 1000BASE-T: 4-pair UTP Cat. 5e, 6 2.5G/5GBASE-T: 4-pair UTP Cat.6, 6A,7
Power over Ethernet	
PoE Standard	IEEE 802.3bt PoE++, 4-pair type 4 PSE Compatible with IEEE 802.3at PoE+ PSE
PoE Power Supply Type	End-span + Mid-span
Power Pin Assignment	End-span: 1/2 (-), 3/6 (+); Mid-span: 4/5 (+), 7/8 (-)
PoE Power Budget (max.)	160 watts
Number of devices that can be powered	4
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3bz 2.5G/5GBASE-T IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3bt Power over Ethernet Plus Plus
Standards Conformance	
Temperature	Operating: 0~50 degrees C Storage: -10~70 degrees C
Humidity (non-condensing)	Operating: 5~95% Storage: 5~95%

Dimensions

94.00

70.30

39.20

DATA   PoE++

PLANET

PoE-in-Use
1 2 3 4   ● 802.3bt/PoH
                ● 802.3at/af
PoE Usage
50W 100W 160W   ○ PWR

M3-2 Ⓑ

Force
802.3bt
PoH + Legacy

DC Input Range:
52-54V⎓, 3.4A max.

49.00 Ⓐ

Ø7.00

Unit: mm

Remark:

A: The distance between two wall mounting holes.

B: The holes for option DIN-Rail Kit mounting (RKE-DIN).

Ordering Information

UPOE-400	4-Port Multi-Gigabit 802.3bt PoE++ Injector Hub (160 watts)

Related Product

UPOE-800G	8-Port Gigabit 802.3bt PoE++ Managed Injector Hub (400 watts)
UPOE-1600G	16-Port Gigabit 802.3bt PoE++ Managed Injector Hub (600 watts)
UPOE-2400G	24-Port Gigabit 802.3bt PoE++ Managed Injector Hub (800 watts)
POE-171	Single-Port 10/100/1000Mbps Ultra PoE Injector (60 watts)
POE-172	Single-Port 10/100/1000Mbps Ultra PoE Injector (60 watts)
POE-173	60-watts Ultra Power over Ethernet Injector
POE-171A-60	Single-Port Multi-Gigabit 802.3bt PoE++ Injector (60 watts)
POE-171A-95	Single-Port Multi-Gigabit 802.3bt PoE++ Injector (95 watts)
POE-175-95	Single-Port 10/100/1000Mbps 802.3bt PoE++ Injector (95 watts)
POE-171S	Single-Port 10/100/1000Mbps Ultra PoE Splitter (12V/19V/24V)
POE-172S	Single-Port 10/100/1000Mbps Ultra PoE Splitter (12V/19V/24V)
POE-173S	Single-Port 10/100/1000Mbps 802.3bt PoE++ Splitter (12V/19V/24V)
POE-E304	1-Port 802.3bt PoE++ to 4-Port 802.3af/at Gigabit PoE Extender