

Product Specifications

Single-Port 10/100/1000Mbps 802.3bt PoE++ Splitter

POE-173S

Version 1.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2019/12/23	Keithy	Initial Release

Author:	Keithy	Editor:	Mark
Reviewed By:	Jonas	Approved By:	Kent

1. PRODUCT DESCRIPTION



Quick and Easy Gigabit 802.3bt PoE++ Network Deployment

PLANET POE-173S Gigabit **802.3bt** Power over Ethernet splitter, which delivers the Ethernet digital data and PoE power from an 802.3bt type-4 PoE++ PSE (power source equipment) over an UTP cable, comes with a selectable **12V, 19V or 24V** DC DIP switch, enabling to deliver a maximum of **60-watt** power output to a non-PoE powered Ethernet device. It supports passive 10/100/1000Mbps Ethernet connection and distance up to 100 meters.

The POE-173S, when working with PLANET 802.3bt type-4 PoE++ switches or injectors offers more network applications to client devices, such as:

- ▶ **PTZ speed dome camera**
- ▶ **Thin client**
- ▶ **AIO (All-in-One) touch PC**
- ▶ Remote digital signage display
- ▶ Non-PoE network devices that need higher power to work normally



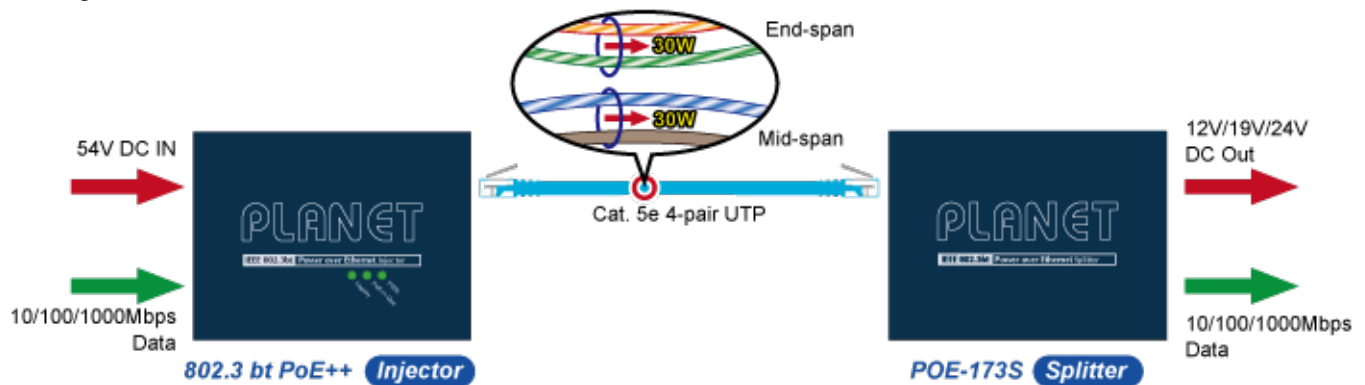
The POE-173S frees the network device deployment from restrictions of power outlet locations, thus eliminating the costs for additional AC wiring and reducing the installation time.

Innovative, Selectable DC Power Output Voltage

Via the innovative 12V/19V/24V DIP switch on the front panel, the POE-173S can supply either 24V DC power to industrial equipment or 12V/19V DC output to the common network devices. It highly increases the flexibility of the product applications.

802.3bt PoE++ Power over 4-pair UTP Cable

The POE-173S and 802.3bt type-4 PoE++ switches use cables that meet the IEEE 802.3bt standard. Instead of delivering power over 2-pair twisted UTP cable – be it end-span (Pins 1, 2, 3 and 6) or mid-span (Pins 4, 5, 7 and 8), they are able to transmit ultra PoE power and data by using all the four pairs of standard Cat. 5e/6 Ethernet cabling.



Environment-friendly Structure

The POE-173S comes with a compact-sized metal housing, making the placement of the unit convenient. It features a ventilated construction in which a cooling fan is not necessary, thereby making its operation noiseless. Moreover, the POE-173S is able to operate reliably and stably without affecting its performance. The deployment of non-PoE equipment with constant power feeding can be easily and quickly done.

Intelligent LED Indicator for Power Budget

The POE-173S helps users to know the current status of PoE power input from remote PSE easily by its advanced LED indication. The POE-173S has three LEDs indicating 30, 60 and 90 watts of PoE power input. With these LED indications, you can efficiently control how much PoE power is getting from PSE and how much output power of the POE-173S is going to a non-PoE device.



2. PRODUCT FEATURES

Interface

- 2 RJ45 interfaces
 - 1-port **data + power input**
 - 1-port **data output**
- 1-port DC plug-in
- 1 12V/19V/24V DC DIP switch

Power over Ethernet

- Complies with 802.3bt Power over Ethernet end-span / mid-span PSE
- Compatible with IEEE 802.3bt PoE++
- Backward compatible with 802.3at PoE+ with up to 30-watt power output
- Splits the PoE power over RJ45 Ethernet cable into 12V/19V/24V DC output
- Distance up to 100 meters

Hardware

- Metal case
- All-in-one compact size design
- LED indicators for PoE in
- Three-mode (12V/19V/24V) DC output DIP switch
- Desktop, wall-mount or DIN-rail (optional) design

3. PRODUCT SPECIFICATIONS

3.1 MAIN COMPONENT

PoE Power IC	LinearTech LT4295H	x 1
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3.2 FUNCTION SPECIFICATIONS

Product		POE-173S
Hardware Specifications		
Interface	Ethernet	1 x 10/100/1000BASE-T RJ45, Ethernet data output port
	PoE in	1 x 10/100/1000BASE-T RJ45, PoE power input port
	Power socket	1 x DC plug-in
DIP Switch		12V/19V/24V DC output
DC Socket		DC receptacle 2.5mm
LED Indicators		PoE in: 30W (Green) 60W (Green) 90W+ (Green)
Data Rate		10/100/1000Mbps
Dimensions (W x D x H)		94 x 70.3 x 39.2 mm
Weight		265g
Installation		Desktop/wall mountable/DIN-rail (optional)
Enclosure		Metal case
Power Requirements		48~56V DC PoE
Unit Output Current (at 56VDC Input)		With 803.bt type 3 PoE++ input: <ul style="list-style-type: none"> ● 4.5A@12V DC ● 2.8A@19V DC ● 2.2A@24V DC With 803.bt type 4 PoE++ input: <ul style="list-style-type: none"> ● 5A@12V DC ● 3.15A@19V DC ● 2.5A@24V DC
Power Consumption		System on: 6 watts Ethernet full loading without DC output: 6.5 watts Ethernet full loading with maximum 12V DC, 5A output: 70 watts
Network Cable	803.bt PoE (60W+)	4-pair UTP Cat. 5, 5e, 6 up to 100m (328ft)
	802.3at PoE (30W)	2-pair UTP Cat. 5, 5e, 6 up to 100m (328ft)

Power over Ethernet	
PoE Standard	802.3bt Type 3/4 Power over Ethernet 4-pair 802.3at PoE+ Compliant with voltage within 48-56V DC
Power Output	DC 12V/19V/24V by DIP switch control
PoE Power Supply Type	End-span + Mid-span End-span Mid-span
Power Pin Assignment	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-) or 1/2 (-), 3/6 (+); 4/5 (+), 7/8 (-)
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 Power over Ethernet Plus IEEE 802.3bt 4-pair Power over Ethernet Type 4
Regulatory Compliance	FCC, CE
Environment Specifications	
Operating Temperature	0~ 50 degrees C
Storage Temperature	-10~ 70 degrees C
Humidity	5 ~ 95% (non-condensing)
Standard Accessories	
Package Contents	POE-173S x 1 User's manual x 1 15cm UTP straight network cable x 1 External female plug cables x 2: <ul style="list-style-type: none"> ● 5.5/2.5mm to 5.5/2.5mm ● 5.5/2.5mm to 5.5/2.1mm

3.3 PHYSICAL SPECIFICATIONS

- **Dimensions (W x D x H)**
94 x 70.3 x 39.2 mm

- **Weight**
265g

■ Product Outlook



■ LED Definition

The LED definitions of the POE-173S are shown below:

LED	Color	Function
30W	Green	Lights to indicate the PoE splitter is connecting to 30W (or more) PoE power source.
60W	Green	Lights to indicate the PoE splitter is connecting to 60W (or more) PoE power source.
90W+	Green	Lights to indicate the PoE splitter is connecting to 90W (or more) PoE power source.

3.4 ENVIRONMENTAL SPECIFICATIONS

■ Operating:

Temperature: 0°C ~ 50 degrees C

Relative Humidity: 5% ~ 90% (non-condensing)

■ Storage:

Temperature: -10°C ~ 70 degrees C

Relative Humidity: 5% ~ 90% (non-condensing)

3.5 ELECTRICAL SPECIFICATIONS

■ 803.bt type 4 PoE++ input:

DC Power (V)	Current (A)	Watts (W)
12V	Max. 5A	60W
19V	Max. 3.15A	60W
24V	Max. 2.5A	60W

■ **803.bt type 3 PoE++ input:**

DC Power (V)	Current (A)	Watts (W)
12V	Max. 4.5A	54W
19V	Max. 2.8A	53W
24V	Max. 2.2A	52.8W

3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

3.7 RELIABILITY

MTBF > 50,000 hrs @ 25 Degree C

3.8 BASIC PACKAGING

- POE-173S x 1
- User's manual x 1
- 5.5/2.5mm to 5.5/2.5mm DC plug cable x 1
- 5.5/2.5mm to 5.5/2.1mm DC plug cable x 1
- 15cm UTP RJ45 cable x 1

3.9 PACKING INFORMATION

Box Dimensions (W x D x H)	200 x 132 x 68 mm
Box Weight	410g
Carton Dimensions (W x D x H)	445 x 442 x 395 mm
Carton Weight	13.3 kg
Carton Unit	30pcs in one carton