

## Product Specifications

### Single-Port 10/100/1000Mbps Ultra PoE Splitter (12V/19V/24V)

#### POE-172S

Version 1.0

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#### Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2017/9/5	Keithy	Initial Release

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## 1. PRODUCT DESCRIPTION



### Quick and Easy Gigabit Ultra PoE Network Deployment

PLANET POE-172S Gigabit ultra Power over Ethernet splitter, meeting the IEEE 802.3at/af standard with 802.3bt ready, delivers the Ethernet digital data and ultra PoE power over the twisted-pair cables to network devices. It separates the digital data and the power into three optional outputs (**12V/19V/24V DC**) and supports a transmission distance of up to 100 meters.

The POE-172S, when working with PLANET 802.3bt Ultra PoE switches or Injectors, offers more PoE applications to client devices, such as:

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

The POE-172S frees the network device deployment from restrictions due to 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-172S 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.

### Ultra PoE Power over 4-pair UTP Cable

The POE-172S and 802.3bt Ultra PoE switches use cables that meet the IEEE 802.3bt/at/af 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 Cat5e/6 Ethernet cabling.

### **Environment-friendly**

The POE-172S 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-172S 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.

## 2. PRODUCT FEATURES

### ➤ Interface

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

### ➤ Power over Ethernet

- Complies ultra Power over Ethernet end-span/mid-span PSE
- Compatible with IEEE 802.3bt
- 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 Power LED and POE-in-use input
- Three-mode (12V/19V/24V) DC output DIP switch

### 3. PRODUCT SPECIFICATIONS

#### 3.1 MAIN COMPONENT

PoE Power IC: Microsemi PD40210A+PD70224

#### 3.2 FUNCTION SPECIFICATIONS

<b>Product</b>		<b>POE-172S</b>
<b>Hardware Specifications</b>		
<b>Interface</b>	<b>Ethernet</b>	1 x 10/100/1000BASE-T RJ45, Ethernet data output port
	<b>PoE in</b>	1 x 10/100/1000BASE-T RJ45, PoE power input port
	<b>Power socket</b>	1 x DC plug-in
<b>DIP Switch</b>		12V/19V/24V DC output
<b>DC Socket</b>		DC receptacle 2.5mm
<b>LED Indicator</b>		System: Power x 1 ( <b>Green</b> ) PoE-in-use x 2 ( <b>Green</b> )
<b>Data Rate</b>		10/100/1000Mbps
<b>Dimensions (W x D x H)</b>		94 x 70.3 x 26.2 mm
<b>Weight</b>		300g
<b>Installation</b>		Desktop/wall mountable
<b>Enclosure</b>		Metal case
<b>Power Requirements</b>		50~56V DC PoE
<b>Unit Output Current (at 56VDC Input)</b>		<b>75-watt PoE input</b> <ul style="list-style-type: none"> <li>● 5A@12V DC</li> <li>● 3.15A@19V DC</li> <li>● 2.5A@24V DC</li> </ul>
<b>Power Consumption</b>		<b>Ethernet full loading without DC output:</b> 3.7 watts <b>Full loading with maximum 12V DC, 5A output:</b> 75 watts
<b>Network Cable</b>	<b>Ultra PoE (60W+)</b>	4-pair UTP Cat. 5, 5e, 6, up to 100m (328ft)
	<b>802.3af/at PoE (15W/30W)</b>	2-pair UTP Cat. 3, 4, 5, up to 100m (328ft)
<b>Power over Ethernet</b>		
<b>PoE Standard</b>		802.3bt Type 3/Type 4 Power over Ethernet 4-pair 802.3at PoE+ and Cisco UPOE compliant with voltage within 50V-56V DC
<b>Power Output</b>		DC 12V/19V/24V by DIP switch control
<b>PoE Power Supply Type</b>		End-span + Mid-span End-span Mid-span
<b>Power Pin Assignment</b>		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 802.3af Power over Ethernet
Regulatory Compliance	FCC, CE

### 3.3 PHYSICAL SPECIFICATIONS

- Dimensions (W x D x H)**

94 x 70.3 x 26.2 mm

- Weight**

300g

- Product Outlook**



- LED Definition**

The LED definitions of the POE-172S are shown below:

LED	Color	Function
PWR	Green	Lights to indicate the ultra PoE splitter has power.
30W	Green	Lights to indicate the ultra PoE splitter is connecting to 2-pair/30W PoE power source.
60W+	Green	Lights to indicate the ultra PoE splitter is connecting to 4-pair/ultra 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

- **75-watt PoE input:**

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

### 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-172S 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 DIMENSIONS

**Dimensions (W x D x H):** 200 x 132 x 68 mm  
**Weight:** 420g  
**Carton Dimensions (W x D x H)** 445 x 442 x 395 mm  
**Carton Weight** 13.1 kg  
**Carton Unit** 30pcs in one carton