

# Product Specification

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

### POE-171S

Version 1.1

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#### Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2013/5/30	Norman Tsai	Initial Release
Version 1.1	2013/8/28	Norman Tsai	Change PoE power output and operation temperature.

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## 1. PRODUCT DESCRIPTION



The PLANET POE-171S Gigabit ultra Power over Ethernet splitter delivers the Ethernet digital data with DC 56V power over the 4 pairs twisted cables as an IEEE 802.3at gigabit high Power over Ethernet splitter, and it separates the digital data and the power into three optional outputs (**12V / 19V /24V DC**) and distance up to 100 meters. The following is key feature of POE-171S.

- **Maximum 60W Output Power Support**
- **Supports IEEE 802.3at Power over Ethernet Injector**
- **12V/19V/24V DC power output through DIP switch**
- **Supports passive 10/100/1000Mbps Duplex Mode**

The POE-171S is an IEEE 802.3at Gigabit Power over Ethernet device which split the 56V DC over the Ethernet cable into 12V/19V/24V DC power output. Works with the IEEE 802.3at power source equipment (PSE), the POE-171S freed the device deployment from restrictions due to power outlet locations, which eliminates the costs for additional AC wiring and reduces the installation time.

### **Quick and Easy Gigabit Ultra Power PoE Network Deployment**

The IEEE 802.3at Gigabit Power over Ethernet devices likes as POE-171, ultra high power PoE injector. It inserts DC Voltage into Cat.5/5e/6 cable, it allowing the cable between the splitter (POE-171S) to transfer data and power simultaneously. The maximum distance between the PoE injector and POE-171S is 100 meters. With PoE injector being installed, it combines the Ethernet digital data with power over the twisted cables as an IEEE 802.3at Gigabit Power over Ethernet Injector. The IEEE 802.3at Gigabit ultra Power over Ethernet splitter POE-171S shall separates the digital data and the power into 12V/19V/24V DC power outputs; it is designed specifically to fill the demand of growing higher power required network equipment such as:

- ▶ **PTZ Speed Dome**
- ▶ **AIO (All-in-One) touch PC**
- ▶ Remote **digital signage** display
- ▶ Other Network devices that need higher power to work normally.

### **Cost effective and easy Cabling installation**

With IEEE 802.3at Gigabit high Power over Ethernet devices installed, the system administrator only has to connect one single RJ-45 Ethernet cable to carry both power and data from an IEEE 802.3at/af PoE injector to POE-171S, and then the POE-171S splits data and DC power to any of IP networking device. Besides, to connect through IEEE 802.3at Power over Ethernet injector and POE-171S, you could also have benefits which includes cost saving, easy for networking planning and higher reliability. Upon IEEE 802.3at compliant devices installation, the POE-171 works together with POE-171S can make the connection while migrating or splitting the power and the Ethernet digital packets, such as PTZ (Pan, Tilt & Zoom) network cameras, PTZ Speed Dome, color touch- screen Voice over IP (VoIP) telephones, multi- channel wireless LAN access points and other Network devices that need higher power to work normally.

## **2. PRODUCT FEATURES**

### ■ **Interface**

- 2-Port RJ-45 interfaces
  - 1-Port **Data + Power** input
  - 1-Port **Data output**
- 1-Port DC output power socket
- 1 DC 12V/19V/24V DIP switch

### ■ **Power over Ethernet**

- Complies ultra Power over Ethernet End-Span/Mid-Span PSE
- IEEE 802.3at/af PoE compliant
- Splits the 56V DC power over RJ-45 Ethernet cable into DC 12V/19V/24V output
- Distance up to 100 meters
- IEEE802.3at/af Injector devices compatible

### ■ **Hardware**

- All-in-one compact size design
- LED indicators for Power LED and POE input
- Three modes DC output DIP switch for 12V/19V/24V

### 3. PRODUCT SPECIFICATION

#### 3.1 MAIN COMPONENT

PoE Power IC: ITC4265

#### 3.2 FUNCTION SPECIFICATIONS

<b>Product</b>	<b>POE-171S</b>	
<b>Hardware Specifications</b>		
<b>Interface</b>	<b>“Ethernet” Data Output port</b>	1 x RJ-45 STP
	<b>“PoE In” PoE power input port</b>	1 x RJ-45 STP
	<b>“DC out” power socket</b>	1
<b>LED Indicator</b>	System: Power x 1 (Green) PoE IN x 2 (Green)	
<b>Network Cable Type</b>	10Base-T: 4-Pair UTP Cat. CAT 5, 5e, 6 up to 100m (328ft) 100Base-TX: 4-Pair UTP CAT 5, 5e, 6 up to 100m (328ft) 1000Base-T: 4-Pair UTP CAT 5, 5e, 6 up to 100m (328ft) EIA/TIA- 568 100-ohm STP (100m)	
<b>Data Rate</b>	10/100/1000Mbps	
<b>Dimension (W x D x H)</b>	94 x 70.3 x 26.2 mm	
<b>Weight</b>	300g	
<b>Unit Output Voltage</b>	DC 12V / 19V / 24V	
<b>Power Consumption</b>	54 watts max.	
<b>Number of device can be powered</b>	1	
<b>Operating Temperature</b>	0 ~ 50 Degree C	
<b>Storage Temperature</b>	-10 ~ 70 Degree C	
<b>Operating Humidity</b>	5 ~ 90%, Relative Humidity, non-condensing	
<b>Storage Humidity</b>	5 ~ 90%, Relative Humidity, non-condensing	
<b>Power over Ethernet</b>		
<b>PoE Standard</b>	IEEE 802.3at High Power over Ethernet End-Span / Mid-Span PD	
<b>PoE Power Output Budget</b>	DC 56V / 50 watts	
<b>PoE Type Mode</b>	End-Span / Mid-Span	
<b>Power Pin Assignment</b>	1/2(-), 3/6(+) / 4/5(+), 7/8(-)	
<b>Standards Conformance</b>		
<b>Standards Compliance</b>	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	
<b>Regulation Compliance</b>	FCC Part 15 Class A, CE	

### 3.3 PHYSICAL SPECIFICATIONS:

**Dimensions:**

94 x 70.3 x 26.2 mm (W x D x H)

**Weight:**

300g

#### ■ Product Outlook

The POE-171S provides one PoE input port at left side, two LEDs (system power and PoE IN) at top side. One RJ-45 port for data output and one DC power jacket for DC power output.



#### ■ LED Definition

The LED Definition of the POE-171S is shown as below:\

LED	Color	Function
PWR	Green	Lights to indicate the ultra PoE splitter has power.
End-Span PoE Input	Green	Lights to indicate the ultra PoE splitter is working on End-span mode
Mid-Span PoE Input	Green	Lights to indicate the ultra PoE splitter is working on Mid-span mode

### 3.4 ENVIRONMENTAL SPECIFICATION

**Operating:**

**Temperature:** -10°C ~ 60 degrees C  
**Relative Humidity:** 5% ~ 90% (non-condensing)

**Storage:**

**Temperature:** -10°C ~ 70 degrees C  
**Relative Humidity:** 5% ~ 90% (non-condensing)

### 3.5 ELECTRICAL SPECIFICATION

DC Power (V)	Current (A)	Watts (W)
12V	4.16A max.	50W
19V	2.63A max.	50W
24V	2.08A max.	50W

### 3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

### 3.7 REALIABILITY

MTBF > 50,000 hrs @ 25 Degree C

### 3.8 BASIC PACKAGING

- POE-171S X1
- User's Manual X1
- 5.5/2.5mm to 5.5/2.5mm DC plug cable X1
- 5.5/2.5mm to 5.5/2.0mm DC plug cable X1
- 15cm UTP RJ-45 cable X1

### 3.9 PACKING DIMENSION

**Dimension:** 58 x 36 x 30.5cm

**Weight:** TBD

26pcs in one carton