

Product Specification

Single-Port 10/100/1000Mbps Ultra PoE Injector (60 watts)

POE-171

Version 1.1

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2013/5/28	Norman Tsai	Initial Release
Version 1.1	2013/8/28	Norman Tsai	Changes operation temperature.

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1. PRODUCT DESCRIPTION



Quick and Easy Gigabit High Power PoE Network Deployment

The POE-171 is a **single port ultra Power over Ethernet Injector** with maximum up to **60 watts** of power output over Ethernet cable. It is designed specifically to fill the demand of growing higher power required network equipments such as:

- ▶ **PoE PTZ Speed Dome**
- ▶ Other Network devices that need higher PoE power to work normally

The POE-171 delivers the Ethernet digital data with DC 56V power over the twisted pair cables as an IEEE 802.3at Gigabit High Power over Ethernet Injector, and distance up to 100 meters.

60 watts of Power over 4-Pair UTP

The POE-171 ultra PoE solution uses cabling standard as IEEE 802.3at/af PoE. Instead of delivering power over 2-pair twisted UTP – be it End-span (Pin 1,2,3 and 6) or Mid-span (Pin 4,5,7 and 8), it provides the capability to source up to 60 watts of power by using all the four pairs of standard Cat5e/6 Ethernet cabling. In the new 4-pair system, two PSE controllers will be used to power both the data pairs and the spare pairs.

Cost effective and easy Cabling installation

With concepts of "Easy to install", "Plug and Play" and "Simple troubleshooting" for business and home users, the POE-171 is in the compact size housing, and it provides one **52~56V** DC input power jacket at its right side, one power LED and two **PoE In-use** LEDs (802.3at End-span and 802.3at Mid-span) at top side. Two RJ-45 ports that **Ethernet** port and **Ethernet+DC** port is at side panel. Simply plug in the Ethernet cables and DC power cord, and the POE-171 is ready to provide high speed network communication and 60 watts ultra power PoE injector functions simultaneously with no need of software configuration.



The **POE-171 Ultra PoE Injector** is an ideal solution that enables network device with high power demand can be powered directly via the RJ-45 Port interface without the need to install power outlets and electrical cabling.

2. PRODUCT FEATURES

■ Interface

- 2-Port RJ-45 interfaces
 - 1-Port **Data + Power** output
 - 1-Port **Data input**
- 1 DC 52~56V input power socket

■ Power over Ethernet

- Ultra Power over Ethernet End-Span / Mid-Span PSE
- IEEE 802.3at PoE compliant
- Backward compatible with IEEE 802.3af PD device
- Supports PoE Power up to 60 watts for PoE port
- Auto-detect of PoE IEEE 802.3at/af equipment and devices from being damaged by incorrect installation
- Remote power feeding up to 100 meters

■ Hardware

- Metal case
- LED indicators for Power LED and PoE In-use LED

■ Standard Compliance

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3at High Power over Ethernet
- IEEE 802.3af Power over Ethernet
- FCC Part 15 Class A, CE

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

PoE Chip IC: Microsemi PD69101

3.2 FUNCTION SPECIFICATIONS

Product	POE-171	
Hardware Specifications		
Interface	“Data” Input Port	1 x RJ-45 STP
	“PoE (Data + Power)” Output Port	1 x RJ-45 STP
	AC Input power socket	1
LED Indicator	System: Power x 1 (Green) PoE Port: PoE In-use x 2 (Green)	
Network Cable Type	10Base-T: 4-Pair UTP 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 (100 meters)	
Data Rate	10/100/1000Mbps	
Unit Output Voltage	DC 56V, 1.16 A max.	
Power Requirement	100-240V AC, 50/60Hz, 1.5A	
Power Consumption	65 watts max.	
Number of device can be powered	1	
Operating Temperature	0 ~ 50 Degree C	
Storage Temperature	-10 ~ 70 Degree C	
Operating Humidity	5 ~ 90%, Relative Humidity, non-condensing	
Storage Humidity	5 ~ 90%, Relative Humidity, non-condensing	
Power over Ethernet		
PoE Standard	IEEE 802.3at High Power over Ethernet End-span / Mid-span PSE	
PoE Power Output Budget	DC 56V / 60 watts max.	
PoE Power Supply Type	End-span / Mid-span	
Power Pin Assignment	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 High Power over Ethernet IEEE 802.3af Power over Ethernet	
Regulation Compliance	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:

237g

■ Product Outlook

One power LED and two **PoE In-use** LEDs (**802.3at End-span** and **802.3at Mid-span**) are at top side. Two RJ-45 ports (**Ethernet** port and **Ethernet+DC** port) are at side panel.



■ LED Definition

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

LED	Color	Function
PWR	Green	Lights to indicate the ultra PoE injector has power.
802.3at End-Span	Green	Lights to indicate the ultra PoE injector is working on End-Span mode and offers up to 30 watts power.
802.3at Mid-Span	Green	Lights to indicate the ultra PoE injector is working on Mid-Span mode and offers up to 30 watts power.

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

Power Requirement: 100-240V AC@50/60Hz, 1.5A max.

Input Voltage: DC 56V, 1.16A

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-171	X1
■ User's Manual	X1
■ 65W AC-DC Power Adaptor	X1
■ AC Power Cord	X1

3.9 PACKING DIMENSION

Dimension: 48 x 43 x 38 cm

Weight: TBD

20pcs in one carton