

Product Specification

60 Watts Ultra Power over Ethernet Injector

POE-173

Version 1.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2013/4/11	Marc Liao	Initial Release

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Reviewed By:	Kent Kang	Approved By:	Tom Shih



1. PRODUCT DESCRIPTION



The PLANET POE-173 Ultra Power over Ethernet Injector provide a maximum of up to **60-watt** power and high speed Ethernet data connection anywhere in your network infrastructure. The following Key features of POE-173 showed as below:

- Maximum 60W Output Power Support
- Backward Compatible with IEEE 802.3at / 802.3af Power over Ethernet
- 10/100/1000Mbps Duplex Mode Support

Quick and Easy Gigabit Ultra Power PoE Network Deployment

The POE-173 is a **Single-Port**, **Ultra Power over Ethernet Injector** with maximum up to **60 watts** of power output over Ethernet cables. 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.

The POE-173 delivers the Ethernet digital data with DC 50V power over the twisted pair cables as an 60-watt Power over Ethernet Injector, and the connected Ultra Power over Ethernet splitter –the POE-171S - willl separate the digital data and the power into three optional outputs (12V / 19V / 24V DC) with distance up to 100 meters.



60 watts of Power over 4-Pair UTP

The POE-173 and POE-171S Ultra PoE solution uses the same 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 / Cat6 Ethernet cabling. In the new 4-pair system, two PSE controllers will be used to power both the data pairs and the spare pairs.

All-in-One and Compact Size Design

With concepts of "Easy to install", "Plug and Play" and "Simple troubleshooting" for business and home users, the POE-173 is an all-in-one designed single-port PoE+ injector with internal power supply. In the compact size housing, the POE-173 provides one 100-240V AC input socket on its front panel, two LEDs (System POWER and PoE ACTIVE) at top side and two RJ-45 ports (POE port and LAN port) at rear panel. Simply plug in the Ethernet cables and power cord, and the POE-173 is ready to provide high speed network communication and Ultra power PoE injector functions simultaneously with no need of software configuration.







Power Side

Top Side LED

LAN Connector Side

Quick and Easy Cabling Installation for PoE Network Deployment

Backward compatible with both 802.3af and 802.3at PoE standards, the POE-173 allows users to flexibly deploy standard and high powered devices to transfer data and power simultaneously through one Ethernet cable for up to 100 meters. The POE-173 frees the Security IP Camera and wireless AP deployment from restrictions of power outlet locations and the additional AC wiring. It thus reduces cables and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place, and most of all, it reduces installation time.

2. PRODUCT FEATURES

Interface

- ☐ 2 x RJ-45 interfaces
 - > 1-Port **Data + Power** output
 - > 1-Port **Data input**
- □ 1 x AC 100-240V input power socket

■ Power over Ethernet

- □ Ultra Power over Ethernet PSE
- ☐ Up to 60 watts of power on 4-pairs UTP
- ☐ Backward compatible with IEEE 802.3at/af PD device
- ☐ Auto-detection of PoE IEEE 802.3at/af equipment and devices from being damaged by incorrect installation
- ☐ Remote power feeding up to 100m

■ Hardware

- ☐ All-in-one compact size design
- □ Internal power supply
- ☐ LED indicators for Power LED and Active LED (PoE ready / In-use)



3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

PoE Power IC: CONFIDENTIAL

3.2 FUNCTION SPECIFICATION

Product		POE-173		
Hardware Specifications				
Interface	LAN	1 x RJ-45 STP, " Data " Input Port		
	POE	1 x RJ-45 STP, "Data + Power" Output Port		
	AC Connector	1 x AC Input power socket, IEC-320 C6		
Network Cable	Ultra PoE (60W)	4-pair UTP Cat. 5, 5e, 6 up to 100m (328ft)		
	802.3af / at PoE (15W / 30W)	2-pair UTP Cat. 3, 4, 5, up to 100m (328ft)		
LED Indicator		System: Power x 1 (Green)		
		PoE Port: Active, PoE ready / In Use x 1 (Green)		
Data Rate		10/100/1000Mbps		
Unit Output Voltage		DC 50V, 1.2A		
Power Requirements		100-240V AC @50/60Hz, 1.5A max.		
Power Consumption		60 watts max.		
Power over Et	hernet			
PoE Standard		Ultra PoE over 4-pairs UTP,		
		High Power over Ethernet End-Span / Mid-Span PSE		
PoE Power Supply Type		End-Span + Mid-Span		
Power Pin Assignment		Pair 1 End-Span: 1/2(+), 3/6(-)		
		Pair 2 Mid-Span: 4/5(+), 7/8(-)		
PoE Power Output		DC 50V / 60-watt PoE via 4-pairs		
Standards Conformance		DC 50V / 30-watt PoE via 2-pairs		
Standards Compliance		IEEE 802.3 10Base-T Ethernet		
		IEEE 802.3u 100Base-TX Fast Ethernet		
		IEEE 802.3ab 1000Base-T Gigabit Ethernet		

3.3 PHYSICAL SPECIFICATIONS:

Dimensions:

115 x 62.5 x 31 mm (W x D x H)

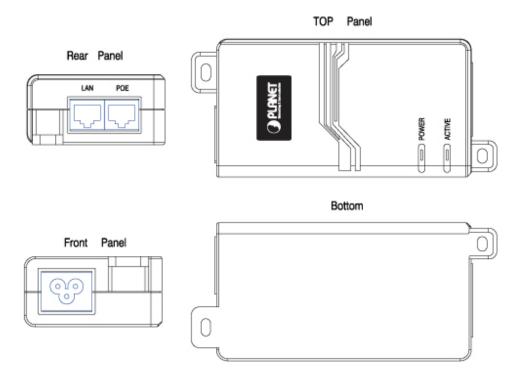
Weight:

227g



■ Product Outlook

The POE-173 provide one 100-240V AC input socket on front panel, two LEDs (System POWER and PoE ACTIVE) at top side and two RJ-45 ports (POE port and LAN port) at rear panel.



■ LED Definition

The LED Definition of the POE-173 is shown as below:\

LED	Color	Function	
POWER	Green	Lights to indicate that the Ultra PoE Injector has power.	
ACTIVE	Green	Lights to indicate the port is providing 50V DC in-line power.	

3.4 ENVIRONMENTAL SPECIFICATION

Operating:

Temperature: 0° C ~ 50 degrees C

Relative Humidity: 5% ~ 95% (non-condensing)

Storage:

Temperature: $-10^{\circ}\text{C} \sim 70 \text{ degrees C}$

Relative Humidity: 5% ~ 95% (non-condensing)

3.5 ELECTRICAL SPECIFICATION

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



3.6 REGULATORY COMPLIANCE

FCC Part 15 Class B, CE

3.7 REALIABILITY

MTBF > 50,000 hrs @ 25 Degree C

3.8 BASIC PACKAGING

■ POE-173■ User's Manual■ AC Power CordX1

3.9 PACKING DIMENSION

Dimension: TBD Weight: TBD

50pcs in one carton