60-Watt Ultra Power over Ethernet Injector



PLANET POE-173 Ultra Power over Ethernet Injector provides a maximum of up to 60-watt power and high speed Ethernet data connection anywhere in your network infrastructure. PLANET Ultra Power over Ethernet solution contains two brand-new products:

- POE-173: 60-watt Ultra Power over Ethernet Injector
- POE-171S: 12V / 19V / 24V DC Power over Ethernet Splitter

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 a 60-watt Power over Ethernet Injector, and the connected Ultra Power over Ethernet splitter – the POE-171S – will separate the digital data and the power into three optional outputs (12V / 19V / 24V DC) with distance up to 100 meters.



Interface

- 2 x RJ-45 interfaces
  - 1-Port 10/100/1000Mbps Data + Power output
- 1-Port 10/100/1000Mbps Data input
  - 1 x AC 100-240V input power socket

Power over Ethernet

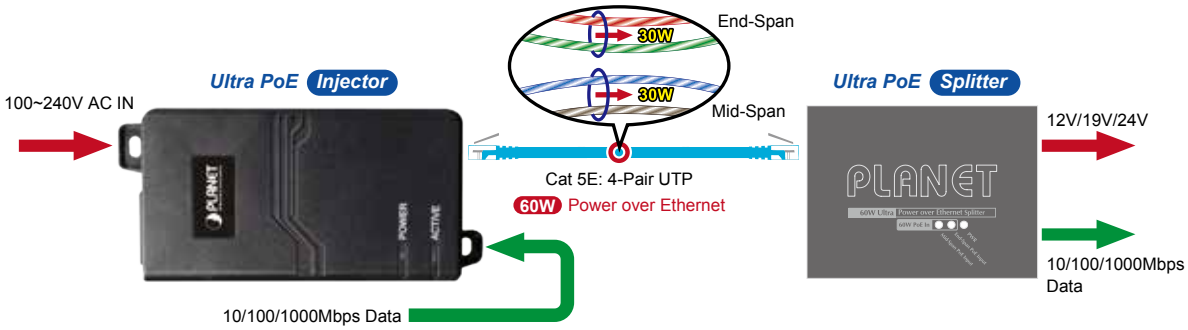
- Ultra Power over Ethernet PSE
- Up to 60 watts of power on 4-pairs UTP
- Backward compatible with IEEE 802.3at/af PD device
- Auto-detection of PoE IEEE 802.3at/af equipment and devices from being damaged by incorrect installation
- Remote power feeding up to 100m

Hardware

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

60 watts of Power over 4-Pair UTP

The POE-173 and POE-171S Ultra PoE solution use 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.



PoE Standard	IEEE 802.3at (802.3af Type 1)	IEEE 802.3at (802.3at Type 2)	Ultra PoE (POE-173)
Maximum Power delivered by PSE	15.4 watts	30 watts	60 watts
Power Available at PD	12.95 watts	25.5 watts	50 watts
Voltage Range	48V	50~57V	50V
Twisted Pair Used	2-Pair	2-Pair	4-Pair
Supported Modes	End-Span or Mid-Span	End-Span or Mid-Span	End-Span + Mid-Span
Supported Cabling	Cat 3/5/5e/6	Cat 3/5/5e/6	Cat5e/6

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, 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



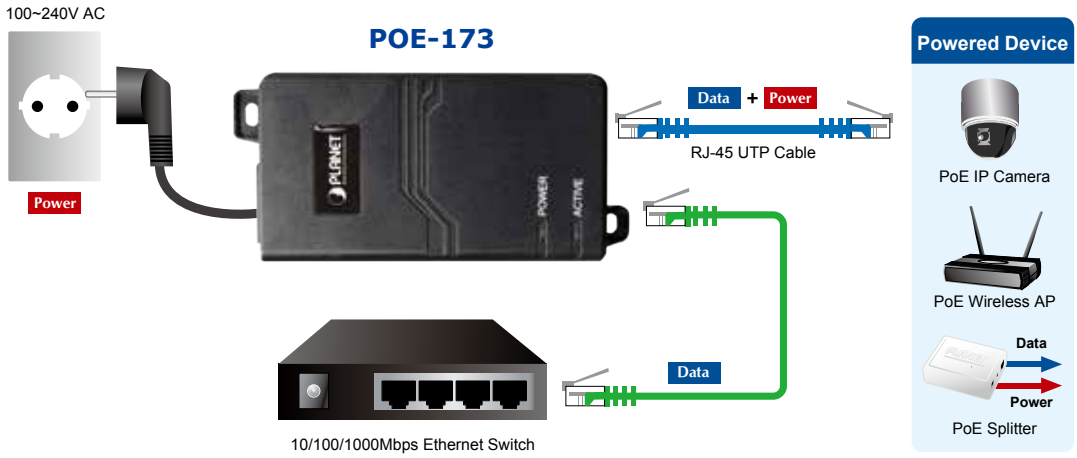
Top Side LED



LAN Connector Side

Quick and Easy Cabling Installation for PoE Network Deployment

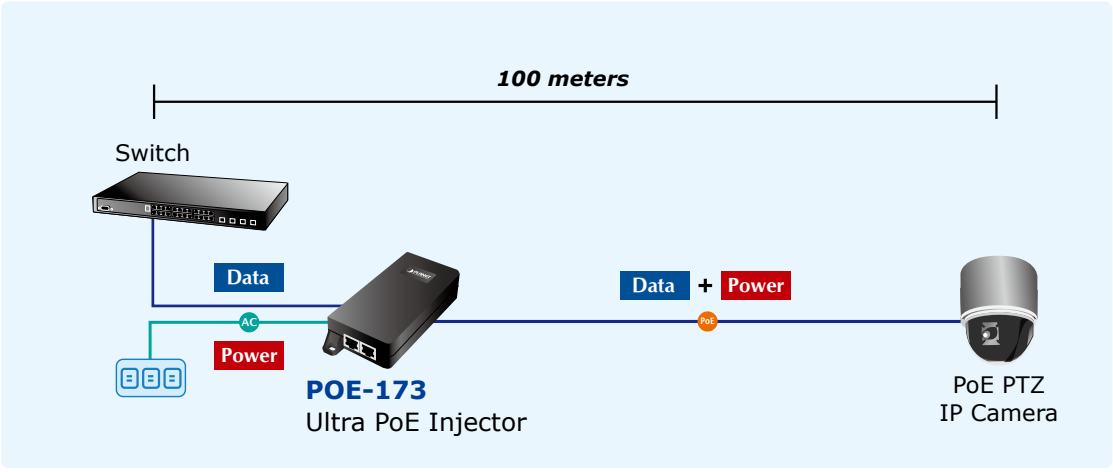
Backward compatible with both 802.3af and 802.3at PoE standards, the POE-173 allows users to flexibly deploy standard and high powered devices to transfer data and power simultaneously through one Ethernet cable for up to 100 meters. The POE-173 frees the Security IP Camera and wireless AP deployment 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.



Application

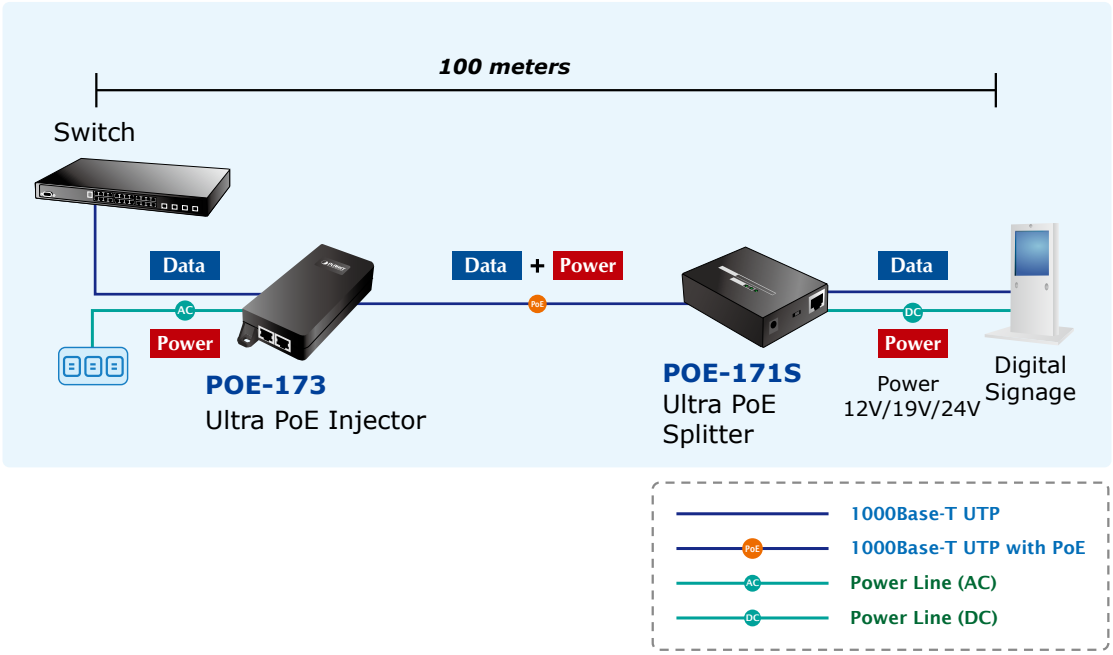
The Ultra PoE Injector Installation

Due to the backward capability of IEEE 802.3at/af PoE standard, the Ultra PoE Injector can directly connect with any IEEE 802.3at/af end-nodes such as PTZ (Pan, Tilt & Zoom) speed dome network cameras, color touch-screen Voice over IP (VoIP) telephones, and multi-channel wireless LAN access points.



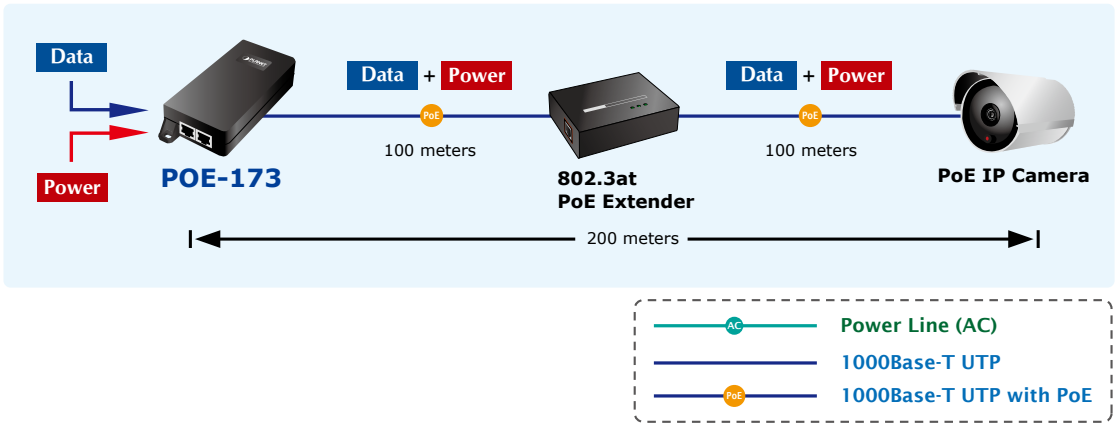
The Ultra PoE Injector and Splitter Installation

For a place which is hard to find the power inlet, the POE-173 and POE-171S operate as a pair to provide the easiest way to power your Ethernet devices which need high power input, such as PTZ (Pan, Tilt & Zoom) network cameras, PTZ Speed Dome, color touch-screen Voice over IP (VoIP) telephones, and multi-channel wireless LAN access points installed on the top of the building or used in enterprise office or home.



The IEEE 802.3at Injector and PoE Extended Installation

Is 100 meter cable long enough for a wide range of IP Surveillance deployments? The answer is certainly not. To achieve the benefits of IP Surveillance and also the long-distance IP Camera distribution, the POE-173 and PLANET PoE Extender,POE-E201, can be a quick and cost-effective option. In the simplest application, the PoE Extender enables a PoE IP camera to be installed up to 200 meters away from the POE-173. The POE-173 delivers PoE power over the first 100 meters to the PoE Extender over UTP cable, and then the PoE Extender forwards the Ethernet data and remaining POE power to the remote PoE IP camera.



Specifications

Model		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
Dimensions (W x D x H)		115 x 62.5 x 31 mm
Weight		227g
Unit Output Voltage		DC 50-57V,1.2A
Power Requirements		100-240V AC @50/60Hz, 1.5A max.
Power Consumption		60 watts max.
Power over Ethernet		
PoE Standard		Ultra PoE over 4-pairs UTP, IEEE 802.3at 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 50-57V/60-watt PoE via 4-pair DC 50-57V/30-watt PoE via 2-pair
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
Regulation Compliance		FCC Part 15 Class B, CE
Environment		
Operating Temperature		0 ~ 50 degrees C
Storage Temperature		-10 ~ 70 degrees C
Operating Humidity		5 ~ 95%, Relative Humidity, non-condensing
Storage Humidity		5 ~ 95%, Relative Humidity, non-condensing

Ordering Information

POE-173	60-watt Ultra Power over Ethernet Injector (10/100/1000Mbps, 4-Pair)

Related PoE Products

POE-171S	60-watt Ultra Power over Ethernet Splitter with 12V / 19V / 24VDC output (10/100/1000Mbps)
POE-162S	IEEE 802.3at Gigabit High Power over Ethernet Splitter with 12V / 24V DC output (10/100/1000Mbps)
POE-151S	IEEE 802.3af Power Over Ethernet Splitter with 5V/12V DC output (10/100Mbps)
POE-152S	IEEE 802.3af Power over Ethernet Splitter with 5V DC / 12V DC output (10/100/1000Mbps)
POE-E201	IEEE 802.3at Power over Gigabit Ethernet Extender (10/100/1000Mbps)
POE-E101	IEEE 802.3af Power over Ethernet Extender (10/100Mbps)

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