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# Gigabit Power over Ethernet Extender 802.3at / 802.3af - 330ft (100m)

POEEXT1GAT

**DE:** Bedienungsanleitung - de.startech.com

FR: Guide de l'utilisateur - fr.startech.com

ES: Guía del usuario - es.startech.com

IT: Guida per l'uso - it.startech.com

**NL:** Gebruiksaanwijzing - nl.startech.com

PT: Guia do usuário - pt.startech.com

## **Packaging Contents**

- 1x Gigabit Power over Ethernet Extender
- 1x Instruction Manual

## **System Requirements**

- RJ45 terminated CAT5 or higher Ethernet cabling ("Solid" UTP cable recommended)
- 10/100/1000 Mbps compatible Power over Ethernet network and/or devices (PoE/PoE+)
- PoE devices must comply with IEEE 802.3at or 802.3af standards
   Note: Total extension distances can often be shorter due to power delivery voltage-drop on the connected cables. Maximum distances can vary based on the quality of the UTP cables and the environment.

## **Product Overview**



### **Output Side**



## **LED Indicators**

LED	Indication
PoE IN (Green)	<b>Solid:</b> Indicates that the port is providing 52-56V (802.3at) / 48V (802.3af) DC in-line power (PSE is connected)

LNK/ACT (Green)

Solid: Indicates that a port link is established (PSE link is detected) Blinking: Indicates that the PoE Extender is actively sending or receiving data over the IN port (activity)

PoE OUT (Green)

**Solid:** Indicates that the port is providing 52-56V (802.3at) / 48V (802.3af) DC in-line power (PD is connected)

## Installation

The PoE Extender supports 10Mbps, 100Mbps and 1000Mbps network speeds and will automatically detect the speed of the incoming connection.

Before installation, check your network infrastructure. If there are any IEEE 802.3at / 802.3af devices that require power, the PoE Extender can provide power and data Ethernet connectivity conveniently, and easily.

The PoE Extender should be installed between the PSE (Power Source Equipment) and the PD (Powered Device). It is powered by PSE and forwards the Ethernet data and remaining PoE power to the PD. The PoE extender does not require an external power supply and will inject power to the PDs without affecting data transmission throughput.

### **Port Connections**

There are two RJ45 ports on the PoE Extender. The "IN" port functions as "PoE (Data and Power) input" and the "OUT" port functions as "PoE (Data and Power) output".

Port	Function
IN Port (Input)	Connect the PoE IN port from a 802.3at / 802.3af Power Sourcing Equipment (PSE) device through CAT5 or higher Ethernet cabling:  PoE injector PoE injector hub PoE switch Another POEEXT1GAT in a daisy chain configuration
OUT Port (Output)	Connect the PoE OUT port to a 802.3at / 802.3af PoE powered device (PD) through CAT5 or higher Ethernet cabling: PoE camera PoE wireless access point PoE splitter Another POEEXT1GAT in a daisy chain configuration

## **Single Unit Installation**

- 1. Using RJ45 cable, connect your Power Sourcing Equipment (PSE) device to the "IN" port on the PoE Extender. The "PoE IN" LED should light up solid.
- 2. Using RJ45 cable, connect your PoE Powered Device (PD) to the "OUT" port on the PoE Extender. The "PoE OUT" LED should light up solid.

**Note:** According to the IEEE 802.3at / 802.3af standard, the PoE Extender will not inject power to the connected RJ45 cable if not connected to a standard IEEE 802.3at / 802.3af device.



### **Multiple Unit Installation**

The PoE Extender supports multiple units in a daisy chain configuration. They can be connected in series to extend power and Ethernet data connectivity to your remote PoE powered devices at longer distances.

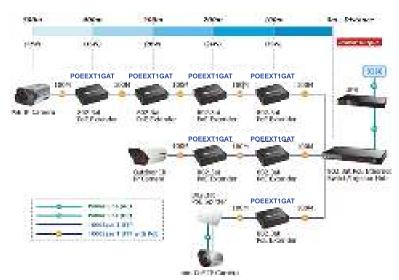
- 1. Using RJ45 cable, connect the "OUT" port on the first PoE Extender unit to the "IN" port on the second PoE Extender unit.
- 2. The "PoE OUT" LED on the first PoE Extender unit should light up solid to show it is providing power to the second PoE Extender unit.
- 3. The "PoE IN" LED on the second PoE Extender unit should also light up solid to show it is receiving power from the first PoE Extender unit.
- 4. Using RJ45 cable, connect your remote PoE powered device to the "OUT" port on the second PoE Extender Unit, or connect to a third PoE Extender unit.

**Note:** You may daisy chain up to 4 PoE Extender units total to a maximum of 500m (the 4th unit will supply IEEE 802.3af up to 12W output).

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Refer to the diagram below for the maximum supported power output at each distance.



Each PoE Extender unit requires ~3.2 Watts maximum to power the unit itself. Check the total power consumption of your devices and the PoE Extender units before setting up in a daisy chain configuration. If the overall power consumption is overloaded, the local PSE could shut-down the entire power system.

Each cable segment is limited in 100m using standard RJ45 terminated CAT5 or higher Ethernet cable. Any other non-standard cable or distances above 100m could result in unstable connections.

## **Wall-Mounting**

The PoE Extender features two mounting holes on the bottom side of the unit. The mounting holes provide the option to wall-mount the PoE Extender as desired.

### **FCC Compliance Statement**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by StarTech.com could void the user's authority to operate the equipment.

### **Industry Canada Statement**

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [A] est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (A)/NMB-3(A)

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