Owner's Manual

1-Port Gigabit PoE+ Water-Resistant Extender

Model: POEOD1GAT-EXT

Package Includes

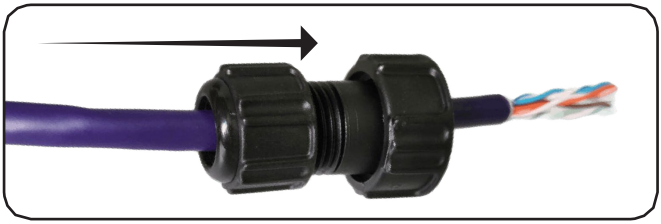
- POEOD1GAT-EXT Gigabit PoE+ Extender
- x2 Water-Resistant Covers
- Owner's Manual

Product Features

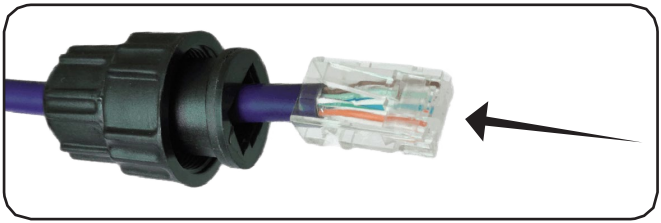
- Save time and money by extending data and power over existing network cables past the 100 m (328 ft.) limit
- Extend a 10/100/1000 Mbps application over longer distances by cascading multiple extenders up to 500 m (1640 ft.)
- Supports all IEEE 802.3at and IEEE 802.3af compliant PoE or PoE+ devices such as wireless LAN access points and bridges, VoIP, IP surveillance cameras, etc.
- Automatically detects and protects PoE/PoE+ equipment from being damaged by incorrect installation (non-PoE devices only receive data)
- Compact aluminum case is IP65 rated for protection against water splashes when the covers are properly installed
- Plug and play—no additional power required
- Compact, wall-mountable design

RJ45 Cable Wire and Crimp Steps

1. Strip an inch or so of the outer skin of a Cat5e/6 cable with a utility knife. Separate and straighten the internal wires, and arrange them in the proper order. Use a wire cutter to trim the wires evenly. Slide one of the included water-resistant covers along the end of the cable.

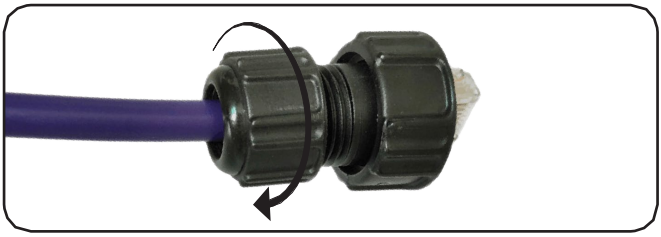


2. Insert the neatly trimmed wires into an RJ45 modular connector plug in the correct order. Use your crimping tool to press the cable jacket and the wires into the RJ45 connector. Be sure to test the connection to ensure the cable is working properly.

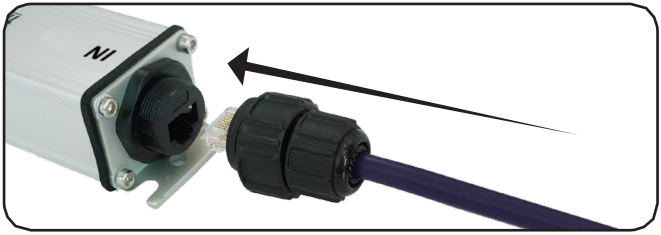


RJ45 Cable Wire and Crimp Steps

3. Tighten the rear of the water-resistant cover until it fits snugly over the cable jacket and will not slide.

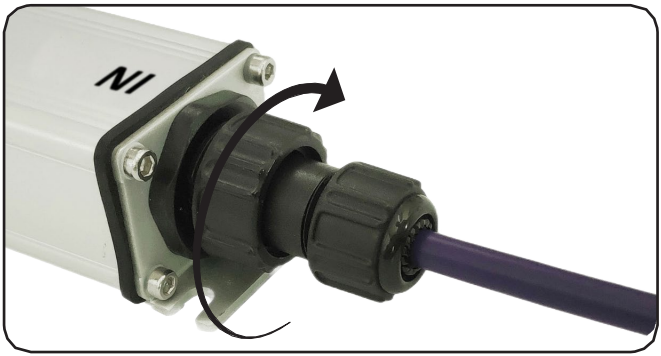


4. Connect the cable's male RJ45 plug to the POEOD1GAT-EXT's female RJ45 port.



RJ45 Cable Wire and Crimp Steps

5. Screw the threaded coupling clockwise until tight. When installed correctly, the IP65-rated extender will be protected against dust and water spray from all directions.



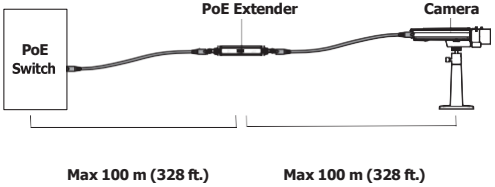
Single Extender Installation

Note: *Prior to connecting the RJ45 cable to input/output ports, install the included water-resistant dust caps onto the cable. Caps can be screwed onto the end of the port connection (see* ***RJ45 Cable Wire and Crimp Steps*** *for more information).*

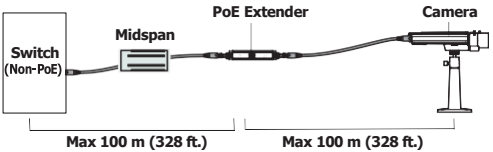
1. Using a Cat5e/6 or better cable (up to 100 m / 328 ft. long), connect your powered source device (such as a PoE switch) into the "IN" port on the unit.
2. Using another Cat5e/6 or better cable (up to 100 m / 328 ft. long), connect your remote PoE powered device (PD) (such as VoIP or IP surveillance camera) into the "OUT" port on the unit.

Note: *Your PoE source must meet or exceed IEEE 802.3at / 802.3af standards. Please see* ***Maximum Supported Power*** *table for more information.*

Single Extender Installation Diagram



Single Extender Installation with Midspan Diagram



Note: *Where external power is required, the power source (e.g.. midspan or PoE injector) must be installed between the Ethernet switch (non-PoE source) and the first PoE extender.*

Multiple Extender Installation

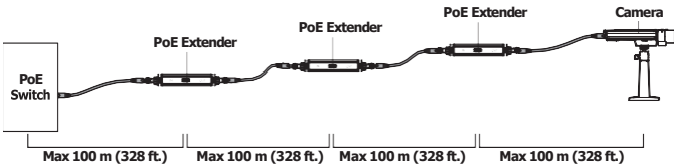
Note: *You may only cascade up to four PoE extender units up to 500 m (1640 ft.) in a single installation.*

1. Using a Cat5e/6 cable or better up to 100 m long, connect your powered source device (such as a PoE switch) into the "IN" port on the unit.
2. Using another Cat5e/6 cable or better up to 100 m long, connect the "OUT" port of the first extender to the "IN" port of the second extender.
3. Repeat Step 2 up to two more times for each additional PoE extender you wish to add, or connect your remote PoE powered device (PD) to the "OUT" port of the second PoE extender.

Notes:

- *The 4th PoE extender will only supply IEEE 802.3af up to 12W.*
- *Your PoE source must meet or exceed IEEE 802.3at / 802.3af standards. Please see* ***Maximum Supported Power*** *table for more information.*

Multi-Extender Installation Diagram



Multiple Extender Installation

Maximum Supported Power

Multiple PoE Extenders can be connected every 100 m (328 ft.) for greater distances. The actual figures depend on operating conditions. The range is determined using 24 AWG or heavier Cat5e, Cat6 or better cable, unless otherwise specified.

Examples for low power PoE devices (PoE Class 1, that requires less than 4W power):

PoE Source			
PoE switch (802.3af)	15W midspan (802.3af)	PoE+ switch (802.3at)	30W midspan (802.3at)
Maximum Distances			
400 m / 1312 ft.	400 m / 1312 ft.	500 m / 1640 ft.	500 m / 1640 ft.

Examples for medium power PoE Devices (PoE Class 2, that requires less than 6W power):

PoE Source			
PoE switch (802.3af)	15W midspan (802.3af)	PoE+ switch (802.3at)	30W mid-span(802.3at)
Maximum Distances			
300 m / 984 ft.	300 m / 984 ft.	400 m / 1312 ft.	400 m / 1312 ft.

Examples for full power PoE Devices (PoE Class 0 or 3, that requires less than 12W power):

PoE Source			
PoE switch (802.3af)	15W midspan (802.3af)	PoE+ switch (802.3at)	30W midspan (802.3at)
Maximum Distances			
200 m / 656 ft.	200 m / 656 ft.	300 m / 984 ft.	300 m / 984 ft.

Multiple Extender Installation

Examples for PoE+ devices (PoE Class 4 that requires less than 22 watts power, or 802.3at compliant):

PoE Source			
PoE switch (802.3af)	15W midspan (802.3af)	PoE+ switch (802.3at)	30W midspan (802.3at)
Maximum Distances			
Not applicable	Not applicable	200 m / 656 ft.	200 m / 656 ft.

Specifications

IEEE Standards	IEEE 802.3af (Power over Ethernet) IEEE 802.3at (High-Power PoE+ Power over Ethernet) IEEE 802.3 (10Base-T Ethernet) IEEE 802.3ab (Gigabit Ethernet) IEEE 802.3u (100Base-TX Fast Ethernet) IEEE 802.3x (Flow control, for full duplex mode)
Media Support	100Base-TX Cat5 UTP/STP RJ45, 8 pin 1000Base-TX Cat5e/6 UTP/STP RJ45, 8 pin
Ports	One RJ45 10/100/1000 Mbps Data + Power Input port One RJ45 10/100/1000 Mbps Data + Power Output port
Protection Functions	Short circuit protection for short GND Overload protection for currents over 0.6A
PoE Pinout Input	IEEE 802.3af/at Standard Mode A Pin 1: DC (-) Pin 2: DC (-) Pin 3: DC (+) Pin 6: DC (+) Pin 7: DC (-) Pin 8: DC (-) Pin 4: DC (+) Pin 5: DC (+)
PoE Pinout Output	IEEE 802.3af/at Standard Mode A Pin 1: DC (-) Pin 2: DC (-) Pin 3: DC (+) Pin 6: DC (+)
Operating Temperature	-10°C to 45°C / 14°F to 113°F
Storage Temperature	20°C to 70°C / -4°F to 158°F
Operating Humidity	0% to 90% RH, Non-Condensing
Storage Humidity	0% to 95% RH, Non-Condensing
Unit Dimensions	143 x 38.6 x 30 mm / 5.6 x 1.5 x 1.2 in.