

Gigabit PoE Extenders

Installation Manual



NR-P101E-TQ



NR-P102E-TQ



NR-P401E-TQ



Model	PoE Standards	PoE Out	IP rating
NR-P101E-TQ	IEEE 802.3af, IEEE 802.3at	1	IP66*
NR-P102E-TQ	IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt (4 pairs, 90W)	1	Indoor†
NR-P401E-TQ	IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt (4 pairs, 60W)	4	Indoor†

*With weather-resistant UTP cable

†Can be used outdoors with an IP66 sealed box and weather-resistant UTP cables

- Extends the range of PoE devices an additional 328ft (100m) with Cat5e cables or higher
- Maximum extended range of up to 984ft (300m) using two extenders
- Connects 10/100/1000BASE-T PoE devices including IP cameras, IP access control, VOIP, IP speakers/intercoms, etc.
- Supports up to gigabit transmission rates
- Passive operation – no external power required and easy plug-and-play installation
- Automatically detects PoE equipment and protects from damage due to faulty installation
- Surge protection for both data and power ports

NR-P101E-TQ:

- IP66 Weatherproof with weather-resistant UTP cable

NR-P401E-TQ:

- 4 Output ports for up to 4 PoE devices

Parts List

All	1x PoE Extender	1x Manual
NR-P101E-TQ includes	2x End caps	
NR-P401E-TQ includes	2x Wall-mount brackets	2x Wall-mounting screws
	2x Plastic wall anchors	4x Extender bracket mounting screws

Specifications

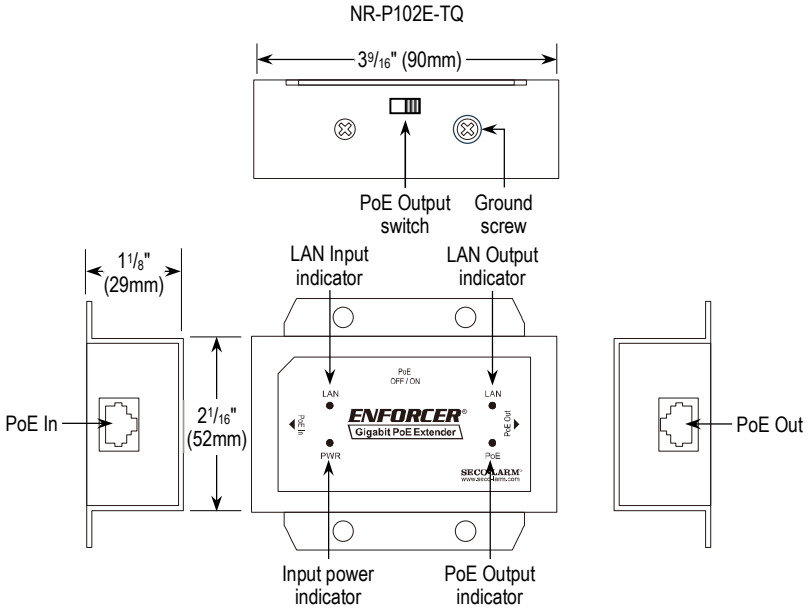
Model		NR-P101E-TQ	NR-P102E-TQ	NR-P401E-TQ	
Connections	PoE In	1x Weather-resistant RJ45	1x Shielded RJ45		
	PoE Out	1x Weather-resistant RJ45	1x Shielded RJ45	4x Shielded RJ45	
Power Input		Power Output			
Transmission range*	656ft (200m)	15W	11.1W	11.1W	4-port<11.1W
		30W	19W	19W	4-port<19W
		60W	N/A	40W	4-port<40W
		90W	N/A	48W	4-port<40W
	948ft (300m)	15W	6.8W	6.8W	N/A
		30W	15W	15W	N/A
		60W	N/A	30W	N/A
		90W	N/A	30W	N/A
Data link		Both pin 1/2, 3/6 and 4/5, 7/8			
Power link		Pin 1/2(+), 3/6(-) up to 25W	Pin 1/2 (-), 3/6 (+) and 4/5 (+), 7/8 (-), up to 85W	Pin 1/2(+), 3/6(-) up to 12W/4 PSE, 25W/2 PSE	
Network cables		Weather-resistant Cat5e or higher	Shielded Cat-5e or higher		
Ethernet speed		10/100/1000 Mbps half/full duplex			
PoE standard		IEEE 802.3af, IEEE 802.3at	IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt (4 pairs, 90W)	IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt (4 pairs, 60W)	
LED Indicators	Power	None	Green = PoE power in	Yellow	
	PoE		Green = PoE switch on	Yellow	
	Data link		LAN x2 green (steady = link, flashing = transmit)	Green, steady	
	Data transmit			Green flashing	
IP Rating		IP66 (with weather-resistant UTP cable)	None†		
Operating humidity		90% (maximum, non-condensing)			
Operating temperature		-13°~101° F (-25°~55° C)	14°~122° F (-10°~50° C)	14°~113° F (-10°~45° C)	
Dimensions		7 ¹ / ₄ "x1 ³ / ₄ "x1 ³ / ₄ " (185x45x45 mm)‡	3 ⁹ / ₁₆ "x2 ¹ / ₁₆ "x1 ¹ / ₈ " (90x52x29 mm)	4 ¹ / ₁₆ "x1 ¹ / ₈ "x3 ³ / ₈ " (119x28x85 mm)	
Weight		8-oz (227g)	7.2-oz (204g)	8.8-oz (250g)	

*The maximum range depends on the actual operating conditions, PoE device power requirements, and the type of PoE device. Cat5e/6 Ethernet cables are recommended.

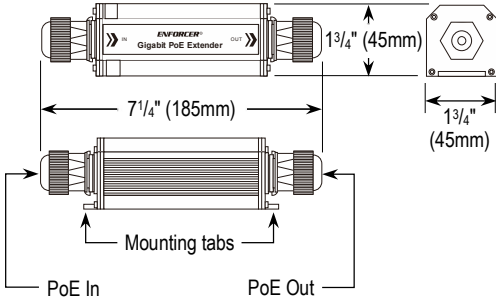
†The NR-P401E-TQ and NR-P102E-TQ can be used outdoors with an IP66 sealed box and weather-resistant UTP cables.

‡Including endcaps

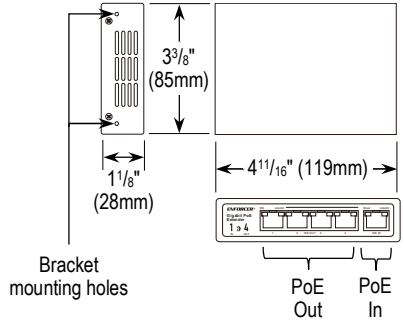
Overview



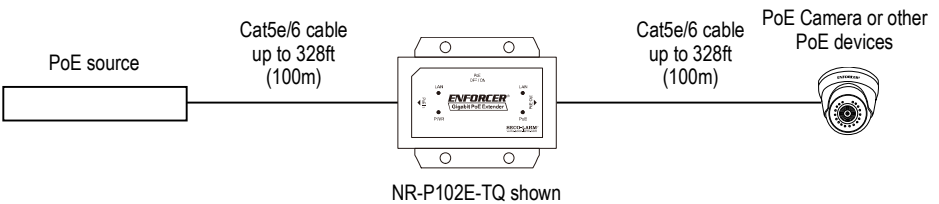
NR-P101E-TQ



NR-P401E-TQ



Sample CCTV Application



Installation

1. Determine the proper location for mounting the extender between the PoE power source and the PoE camera, ensuring that neither cable exceeds 328ft (100m) in length.
 2. Mount the extender (except NR-P401E-TQ) with 4 screws (not included) and the mounting tabs.
 3. **NR-P401E-TQ** – Attach the mounting brackets to the extender, with the included bracket mounting screws. Drill holes and attach the extender/bracket assembly to the desired location using the two wall mounting screws and, if needed, the plastic wall anchors.
 4. Ensure that power to the PoE power source and all PoE devices is off.
 5. Connect the cables from the PoE power source to the *PoE In* port of the extender.
 6. Connect the cables from the PoE cameras to the *PoE Out* port of the extender.
 7. **NR-P102E-TQ** – Connect a ground wire with resistance less than 0.5Ω to the grounding screw and move the Extender's PoE output switch to ON.
 8. Turn on the PoE power source and wait up to one minute for the devices to start and establish connections.
 9. Test to ensure that all devices are working properly.
-

Troubleshooting

PoE device doesn't function properly

- Ensure that all devices are turned on
- Ensure that the PoE device is functioning by plugging it directly into the PoE switch, computer, etc.
- Double-check that the cables were connected properly
- Run a continuity test on all wires in the cable
- Equipment at both ends must be at the same link speed, 10BASE-T with 10BASE-T, 100BASE-T with 100BASE-T, etc.
- Replace with a higher-grade cable for better performance
- Ensure that cable lengths are within the allowable range and consistent with the remote PoE device power consumption and reduce cable length as needed
- No more than 2 PoE extenders may be used
- Check that power consumption is within the specifications

FCC COMPLIANCE STATEMENT

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 UNDESIRE OPERATION.

Notice: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

IMPORTANT: Users and installers of this product are responsible for ensuring this product complies with all national, state, and local laws and statutes related to monitoring and recording audio and video signals. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or statutes.

IMPORTANT: Users and installers of this product are responsible for ensuring that the installation and configuration of this product complies with all national, state, and local laws and codes. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or codes.

California Proposition 65 Warning: These products may contain chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

WARRANTY: This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for one (1) year from the date of sale to the original customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM. This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship. The sole obligation of SECO-LARM and the purchaser's exclusive remedy, shall be limited to the replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damage of any kind to the purchaser or anyone else.

NOTICE: The SECO-LARM policy is one of continual development and improvement. For that reason, SECO LARM reserves the right to change specifications without notice. SECO-LARM is also not responsible for misprints. All trademarks are the property of SECO-LARM U.S.A., Inc. or their respective owners. Copyright © 2023 SECO-LARM U.S.A., Inc. All rights reserved.

SECO-LARM® U.S.A., Inc.

16842 Millikan Avenue, Irvine, CA 92606

Phone: (949) 261-2999 | (800) 662-0800

Website: www.seco-larm.com

Email: sales@seco-larm.com

 PICSNT

MI_NR-Px0xE-TQ_230908.docx