NetWay112X

Single Port PoE+ Injector for Standard NetWork Infrastructure

Installation Guide

Overview:

Altronix NetWay112X is a single port PoE+ injector which provides power and passes data (e.g. video) for PoE/PoE+ compliant devices. Devices may be located up to 100m from NetWay112X.
To extend data distance for an additional 100m use NetWayXTX repeater module.

Features:

Agency Listings:
- **CE** - European Conformity.

Input:
- 12VDC-16VDC @ 2A

Data:
- One (1) PoE+ port provides power and passes data over ethernet (CAT5) cable up to 100m.
- Data rate: 10/100 Base-T compliant.

PoE:
- IEEE 802.3at (30W) and 802.3af (15W) compliant.

Features:
- Power/status LEDs.
- PoE manual shutdown feature allows for cameras and/or edge devices to be reset.
- Auto detection and protection of legacy non-PoE cameras/devices.
- Data rate: 10/100 BASE-T compliant.

Dimensions (W x L x H approx.)**:**
3.5" x 3.5" x 1" (88.9mm x 88.9mm x 25.4mm)

Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction.
Wiring should be UL Listed and/or Recognized wire suitable for the application.
Unit is intended to be used with a UL Listed Class 2 or LPS (limited power supply). NetWay112X is not intended to be connected to outside plant leads and should be installed indoors within the protected premises.
NetWay112X is intended for indoor use only.

1. Mount NetWay112X in desired location utilizing the mounting hole *(Fig. 1a, pg. 1)*. Use a proper fastener and/or wall anchor when securing NetWay112X with screw through its mounting hole to the wall.
2. Connect UL Listed Class 2 or LPS (limited power supply) providing 12VDC-16VDC @ 2A to terminals marked **[– DC + Input]** carefully observing polarity to avoid potential damage *(Fig. 1b, pg. 1)*.
   Use 22AWG - 16AWG wire for this connection.
   Input power should be a Access Control power supply or a transformer.
3. Connect ethernet port marked [IN] on NetWay112X to the input of a network switch or video server *(Fig. 1b, pg. 1)*.
4. Connect ethernet port marked [OUT] on the NetWay112X to the PoE/PoE+ device *(Fig. 1b, pg. 1)*.
5. LEDs will illuminate indicating normal operation *(Fig. 1, pg. 1)*.
6. To initiate PoE shutdown connect 12VAC to 24VAC or 5VDC to 24VDC to the input terminals marked [Power Shutdown] on the NetWay112X *(Fig. 1b, pg. 1)*. The PoE output voltage may be shut down by manually applying voltage in the rated range *(PoE Shutdown Voltage Range in Specifications)*. Upon applying voltage, the output will drop to zero volts. Removal of voltage from the shutdown terminals or applying zero volts to the shutdown terminals will allow the PoE output to operate normally to supply power to PoE compliant devices.
   Note: Return to normal operation from shutdown can take about 4 seconds. Although there is no output voltage to power PoE devices during shutdown, data signals may still be present on the data pair lines of the CAT5 cable.

Fig. 1

Fig. 1a

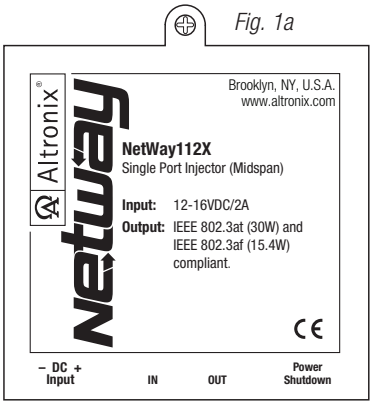
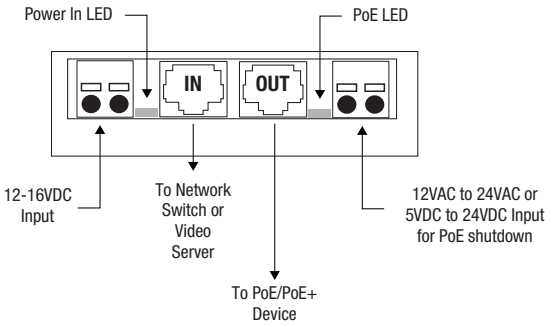


Fig. 1b



NetWay112X Port Status and LED Flash Codes

Port Status	Flash Code	Flash Pattern
Non-Powered Device $0\Omega < R_{PORT} < 200\Omega$	OFF	LED OFF
Port Open $R_{PORT} > 1M\Omega$	OFF	LED OFF
Port On 25kΩ	ON	LED ON
Low Signature Resistance $300\Omega < R_{PORT} < 15k\Omega$	1 Flash	☼ ● ● ● ☼ ● ● ● ☼ ● ● ●
High Signature Resistance $33K\Omega < R_{PORT} < 500k\Omega$	2 Flashes	☼☼ ● ● ☼☼ ● ● ☼☼ ● ●
Port Overload Fault	5 Flashes	● ● ● ● ☼☼☼☼☼ ● ● ● ●

Maintenance:

Unit should be tested at least once a year for the proper operation as follows:
While the NetWay112X is powered and the output is connected to a suitable UL Listed PoE device, it should be tested for PoE shutdown operation (For UL 60950-1 applications only).

Troubleshooting:

Refer to *NetWay112X Port Status and LED Flash Codes above.*

Technical Specifications:

Parameter	Description
No. of Ports	One (1) PoE/PoE+ port
Input power requirements	12VDC-16VDC @ 2A
Indicators	Power/status LEDs
PoE Shutdown Voltage and Current Range	5VDC to 24VDC or 12VAC to 24VAC Maximum current: 2mA for 5VDC. Maximum current for higher voltages: 10mA
Environmental Conditions	Operating Ambient Temperature (UL60950-1): -40ºC to 50ºC (-40º to 122ºF). Relative humidity: 85%, +/ - 5%. Storage Temperature: -40º to 70ºC (-40º to 158ºF). Operating Altitude: -304.8 to 2,000m.
Regulatory Compliance	CE European Conformity.
Weights (approx.)	Product: 0.2 lb. (0.1kg) I Shipping: 0.25 lb. (0.11kg).

Typical Applications:

Fig. 2 - PoE/PoE+ Camera Deployment.

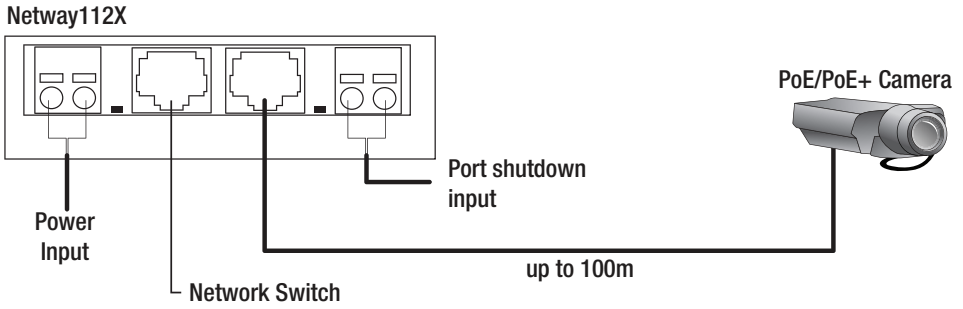


Fig. 3 - Extending Data Range utilizing NetWayXTX Extender *(refer to NetWayXTX Installation Instructions).*

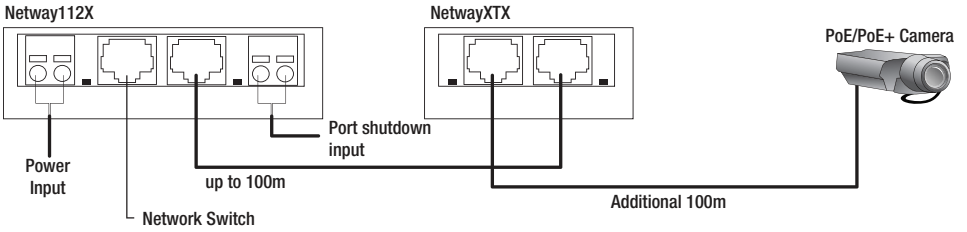


Fig. 4 - Powering 12VDC IP Camera utilizing NetWay3012 Adapter
(refer to NetWay3012 Installation Instructions)

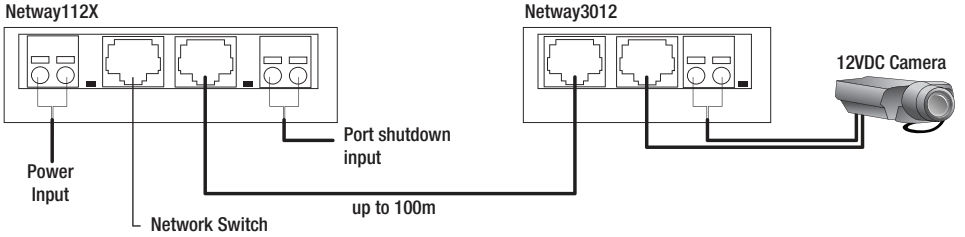
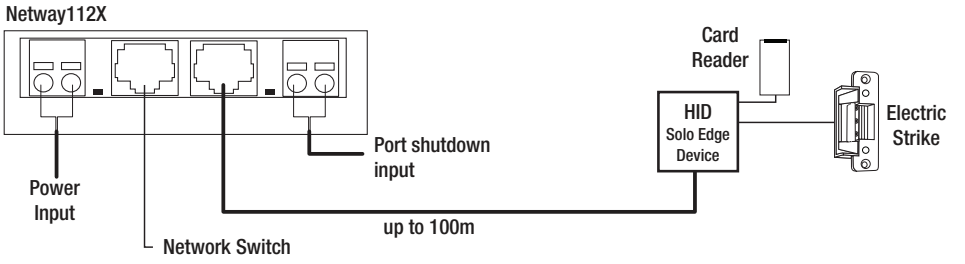


Fig. 5 - IP Access Control Deployment



Notes:

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