## Power over the Ethernet



# PoE Midspan Solution for Standard Network Infrastructure

## Installation Guide

Models Include:

NetWay8

- Eight (8) Port PoE Midspan Injector

NetWay16

- Sixteen (16) Port PoE Midspan Injector





#### Overview:

Altronix NetWay8/NetWay16 Midspans provide power and pass data for PoE compliant cameras/edge devices. Cameras/ edge devices may be located up to 100m (328 ft.) from the NetWay unit. A NetWayXT repeater module can be utilized to extend the distance an additional 100m (328 ft.) for a total range of up to 200m (656 ft.). A maximum range of 600m (1968 ft.) is possible using multiple repeaters, based on camera/device port requirement. NetWay Midspans are capable of supporting non-PoE compliant fixed and PTZ IP cameras utilizing NetWay1512 or NetWay3012 adapters.

## **NetWay Specifications:**

#### NetWay8:

- Eight (8) ports of cameras/edge devices over ethernet (CAT5) Sixteen (16) ports of cameras/edge devices over ethernet (CAT5) cable up to a distance of 100m (328 ft.) per port.
- 115VAC 60Hz, 3 amp (NetWay8).

## NetWay16:

- cable up to a distance of 100m (328 ft.) per port.
- 115VAC 60Hz, 4.9 amp (NetWay16).

## **Common Specifications:**

## Agency Listings:

• UL/CUL Listed for Information Technology Equipment (UL 60950-1).

#### Power:

- Unit provides up to 30W max. full power per port. Total power: NetWay8 - 150W, NetWay16 - 300W.
- IEEE 802.3af and IEEE 802.3at compliant (PoE Plus).
- Short circuit protection.

#### Functions:

 Auto detection and protection of legacy non-PoE cameras/edge devices.

## Features (cont'd):

- Illuminated master power disconnect circuit breaker with manual reset (switch).
- Individual port status LEDs.
- IEC 320 3-wire grounded line cord (detachable).
- Unit can be rack or shelf mounted.
- 1U rack mount chassis for use in standard EIA 19" rack.

#### Accessories:

#### NetWay1512:

• 15W adapter for non-PoE compliant IP cameras.

#### NetWay3012:

 25W adapter for non-PoE compliant IP fixed or PTZ cameras.

#### NetWayXT:

• PoE repeater module extends range 100m (328 ft.).

#### Installation Instructions:

NetWay is not intended to be connected to outside plant leads.

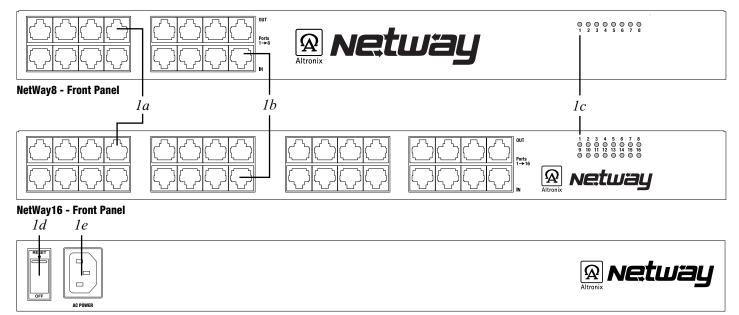
- 1. Attach mounting brackets to NetWay unit for rack or wall mount installation (Figs. 7 or 8, pg. 10). Affix rubber pads to NetWay for shelf installation (Fig. 9, pg. 10).
- 2. Secure the unit in a rack or place unit on a shelf as desired.
  - **Note:** The following factors should be taken into consideration when installing these rack mount units:
  - a. The unit is to be installed in a space where the maximum ambient temperature does not exceed 104°F (40°C).
  - b. Take care to insure there is sufficient air flow around the unit and that obstructions do not impede it.
  - c. When mounting units in rack, take care to avoid uneven loading which can cause a hazardous condition.
- 3. Set illuminated master power disconnect circuit breaker to the (OFF) position (Fig. 1d, pg. 3).
- 4. Plug the grounded AC line cord (included) into the IEC 320 connector of the NetWay unit (Fig. 1e, pg. 3). Plug unit into a reliable earth grounded socket. When using multiple units the sum of the individual name plate ratings should not exceed the supply circuit rating.
- 5. Connect structured cables from port marked [IN] on NetWay to the corresponding inputs of an ethernet switch or video server (Fig. 1b, pg. 3, Fig. 4, pg. 5).
- 6. Connect structured cables from port marked [OUT] on NetWay to PoE compliant camera/edge devices (Fig. 1a, pg. 3, Fig. 4, pg. 5).
- 7. Upon completion of wiring set illuminated master power disconnect circuit breaker to the RESET (ON) position (Fig. 1d, pg. 3).
- 8. Port status LEDs on the NetWay will initialize when PoE devices are connected as follows:
  - LED will illuminate when devices are IEEE 802.3af compliant.
  - LED will blink once and illuminate when devices are IEEE802.3at compliant (PoE Plus).

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#### **Port Status and LED Flash Codes:**

Port Status	Flash Codes	Description
All Ports Off	Sequential LED Port Scan	No devices connected
Port Off	OFF	LED OFF
Port On	ON	LED ON
Class 4 detection Port	Blinks 2 times	
Non-compliant Port	2Hz	
Port Overload Fault	5Hz	
4 Port Overload Grouped	5Hz	4 LEDs
8 Port Overload Grouped	5Hz	LED's 1-8 Power Supply Overload for ports 1-8. LED's 9-16 Power Supply Overload for ports 9-16.

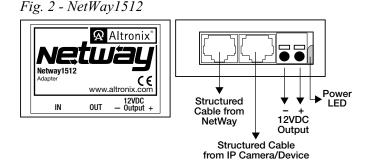
Fig. 1



- NetWay8 & NetWay16 Rear Panel
- 1a OUT 1-8 (NetWay8), OUT 1-16 (NetWay16): Structured cable to PoE compliant cameras/edge devices.
- 1b IN 1-8 (NetWay8), IN 1-16 (NetWay16): Structured cable to ethernet switch or video server.
- 1c LED(s) 1-8 (NetWay8), 1-16 (NetWay16): Port status LEDs.
- 1d Illuminated master power disconnect circuit breaker (switch):
  - OFF position Circuit breaker tripped Switch not illuminated.
  - RESET (ON) position Switch illuminated.
- 1e IEC 320 Connector: 115VAC 60Hz (grounded line cord included).

#### Installing a NetWay1512 adapter for 12VDC IP cameras up to 13W:

- 1. Mount NetWay1512 in proximity to IP camera (Fig. 2, pg. 4). Affix one side of velcro (supplied) to NetWay1512 and the place the second side of the velcro in the desired location.
- 2. Connect structured cable from port marked [IN] on NetWay1512 to any ports marked [OUT] of NetWay (Fig. 2, pg. 4, Fig. 1a, pg. 3).
- 3. Connect structured cable from port marked [OUT] on NetWay1512 to the IP camera (Fig. 2, pg. 4).
- 4. Connect 12VDC output from NetWay1512 terminals marked [-12VDC +] to the power input of the IP camera (Fig. 2, pg. 4). Polarity must be observed.
- 5. Power LED indicator will illuminate on NetWay1512 under normal conditions (Fig. 2, pg. 4).



#### Installing a NetWay3012 adapter for 12VDC IP PTZ up to 25W:

- 1. Mount NetWay3012 in proximity to IP camera utilizing mounting hole (*Fig. 3, pg. 5*). Use a proper fastener and/or wall anchor when securing NetWay3012M to the wall.
- 2. Connect structured cable from port marked [IN] on NetWay3012 to ports marked [OUT] of NetWay (Fig. 3, pg. 5, Fig. 1a, pg. 3).
- 3. Connect structured cable from port marked [OUT] on NetWay3012 to the IP fixed or PTZ camera (Fig. 3, pg. 5).
- 4. Connect 12VDC output from NetWay3012 terminals marked [+ 12VDC -] to the power input of the IP camera (Fig. 3, pg. 5). Polarity must be observed.
- 5. Power LED indicator will illuminate on NetWay3012 under normal conditions (Fig. 3, pg. 5).

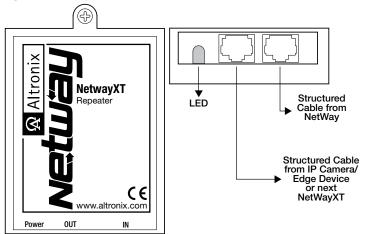
#### **Installing NetWayXT repeater module:**

- 1. Mount NetWayXT in desired location utilizing the mounting hole (Fig. 3, pg. 4). Use a proper fastener and/or wall anchor when securing NetWayXT to the wall.
- 2. Connect structured cable from port marked [OUT] on NetWay to port marked [IN] on the NetWayXT (Fig. 3, pg. 4, Fig. 1a, pg. 3).
- 3. Connect structured cable from port marked [OUT] on NetWayXT to the PoE camera/edge device or next NetWayXT repeater (Fig. 3, pg. 4).
- 4. Port status LEDs will illuminate on NetWayXT indicating the port is operational (refer to LED definitions on pg. 4).
- 5. Power LED will illuminate indicating 12VDC output (Fig. 3, pg. 4).

#### Port LED definitions for NetWayXT repeater:

Status	Green LED	Yellow LED
OFF	Indicates it is connected as 10Base-T or no link.	Indicates no link.
ON	Indicates it is connected as 100Base-TX.	Indicates a link.
Blinking	<del></del>	Indicates activity.

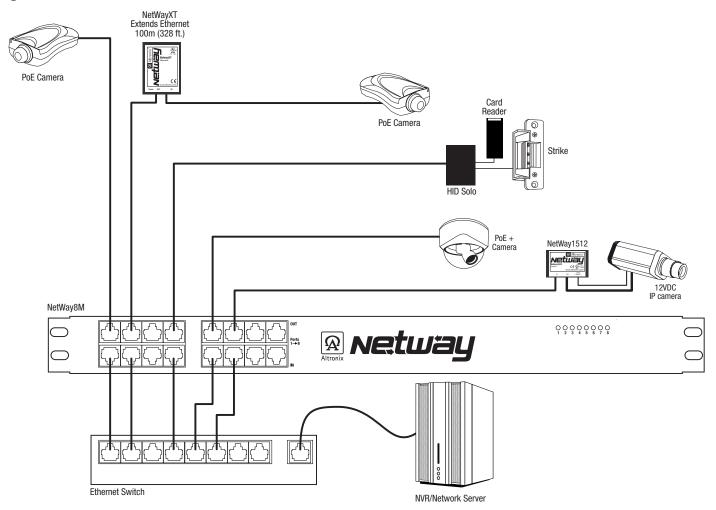
Fig. 3 - NetWayXT



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## NetWay8/NetWay16 Typical Application:

Fig. 4



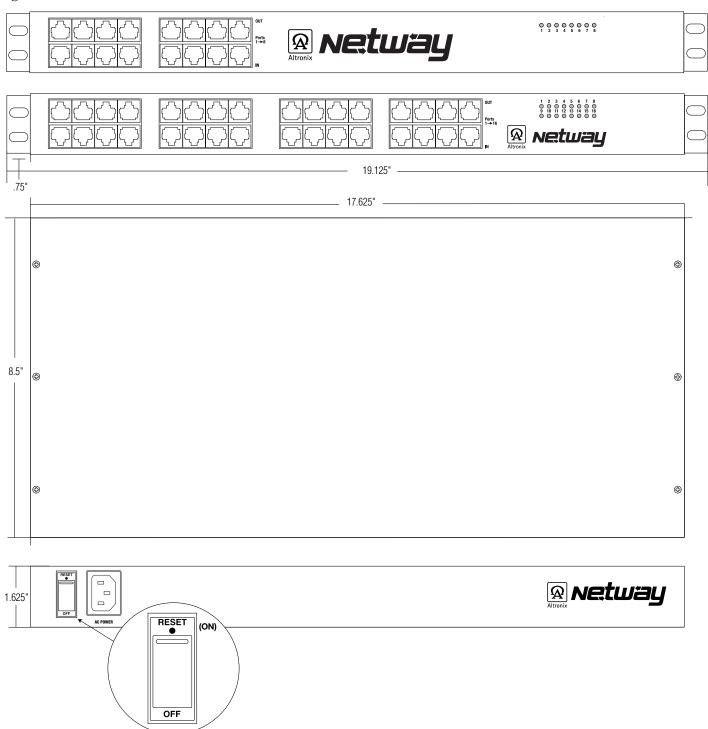
## **Technical Specifications:**

Parameter	Description	
No. of Ports	NetWay8 - Eight (8) Ports. NetWay16 - Sixteen (16) Ports.	
Input power requirements	115VAC 60Hz, 3 amp (NetWay8). 115VAC 60Hz, 4.9 amp (NetWay16).	
Indicators	Port Status LED	
Environmental Conditions	Operating Ambient Temperature: UL60950-1 - 32°F to 104°F (0°C to 40°C).  Relative humidity: 85%, +/ – 5%  Storage Temperature: — 4° to 158°F (— 20° to 70°C) Storage  Operating Altitude: — 1000 to 10,000 ft. (— 304.8 to 3048m).	
Regulatory Compliance  UL/CUL Listed for Information Technology Equipment (UL 60950-1).  UL Listed for Access Control Systems (UL 294).  CUL Listed - CSA Standard C22.2 No.205-M1983, Signal Equipment.  CE approved		

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## NetWay8M/NetWay16M Rack Mount Chassis Mechanical Drawing & Dimensions:

Fig. 6





The lightning flash with arrow head symbol within an equilateral triangle is intended to alert the user to the presence of an insulated "DANGEROUS VOLTAGE" within the products enclosure that may be of sufficient magnitude to constitute an electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.







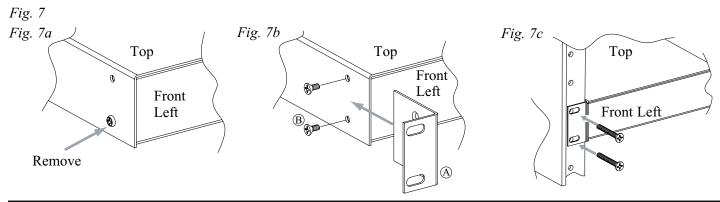
**CAUTION:** To reduce the risk of electric shock do not open enclosure. There are no user serviceable parts inside. Refer servicing to qualified service personnel.

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## **Mounting Options:**

#### **Rack Mount Installation**

- 1- Remove and discard factory installed screws from both sides of rack chassis (Fig. 7a).
- 2- Install mounting brackets (A) on the left and right side of rack chassis using the four (4) flat head screws (B) (included) (Fig. 7b).
- 3- Place unit into desired EIA 19" rack position and secure with mounting screws (not included) (Fig. 7c).

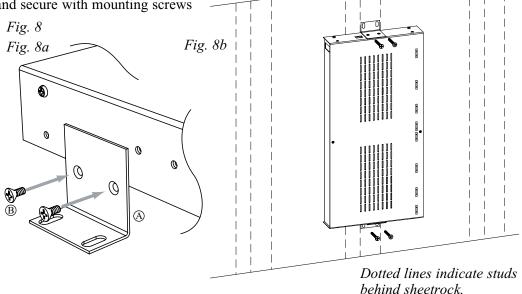


#### **Wall Mount Installation**

1- Install mounting brackets (A) on the left and right side of rack chassis using four (4) flat head screws (B) (included) (Fig. 8a).

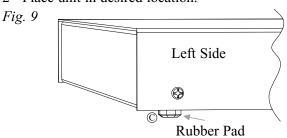
2- Place unit at desired location and secure with mounting screws (not included) (Fig. 8b).

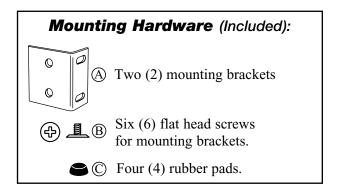
Caution: It is necessary to make sure mounting screws are securely fastened to a beam when installing the unit vertically.



#### Shelf Installation

- 1- Position and affix rubber pads (C) (included) at each corner on the bottom of the unit (Fig. 9).
- 2- Place unit in desired location.





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## **Notes:**

Altronix is not responsible for any typographical errors. Product specifications are subject to change without notice.



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