NETWAY

Power over the Ethernet

NetWay G Series
PoE Midspan Solution for
Standard Network Infrastructure

Models Include:

NetWay81G
- Eight (8) Port PoE Midspan Injector
- 240W total power

NetWay81GL
- 8-Port Hi-PoE Midspan Injector
- 240W total power

NetWay81GP
- 8-Port Hi-PoE Midspan Injector
- 480W total power

NetWay161G
- Sixteen (16) Port PoE Midspan Injector
- 480W total power

Installation Guide

C E

Altronix®

More than just power.™

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Table of Contents:

Overview:

Altronix NetWay81G, NetWay81GL, NetWay81GP and NetWay161G Midspans provide PoE/PoE+/Hi PoE (up to 60W) power per port, and pass data at 10/100/1000 Mbps at distances up to 100m. Features also include an integral battery charger for applications requiring backup.

Features:

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

Input:
- **NetWay81G/81GL:**   115VAC, 60Hz, 3.25A or 230VAC, 50/60Hz, 2.0A.
- **NetWay81GP/161G:** 115VAC, 60Hz, 5.5A or 230VAC, 50/60Hz, 3.0A.

Power:
- Unit supplies PoE output voltage (55V).
  Total power:
  NetWay81G (up to 30W per port):   240W.
  NetWay81GL (up to 60W per port):   240W.
  NetWay81GP (up to 60W per port):   480W.
  NetWay161G (up to 30W per port):   480W.
- IEEE 802.3af and IEEE 802.3at compliant (PoE/PoE+/60W).
- Short circuit protection.

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

Ethernet:
- Eight (8) or sixteen (16) ports for cameras/ edge devices over ethernet.
- Wire type: 4-pair CAT5e and higher.
- Speed: 10/100/1000 Mbps.

Battery Backup:
- Built-in battery charger *(optional rack mount battery enclosure - RE2)*.
- Automatic switchover to stand-by battery when AC fails.

Accessories:
NetWayXT:
- PoE repeater module extends data range 100m.
NetWayXTX:
- PoE/PoE+ repeater module extends data range 100m.
NetWayXTG:
- Gigabit PoE/PoE+ repeater module extends data range 100m.

Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction. NetWayG unit is not intended to be connected to outside plant leads. These products are for indoor use only and must be installed within the protected premises. If battery bracket is removed, then the unit must be installed in a restricted access area *(Fig. 1b, pg. 3)*.

Fig. 1a   *Fig. 1b*

1. Attach mounting brackets to NetWayG unit for rack or wall mount installation *(Fig. 5 or 6, pg. 8)*.
   Affix rubber pads to NetWayG for shelf installation *(Fig. 7, pg. 8)*.
2. Secure the unit in a rack or on a wall, 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 104ºF (40ºC).
   b. Take care to ensure that there is sufficient air flow around the unit and that obstructions do not impede it.
   c. When mounting units in a rack, take care to avoid uneven loading which can cause a hazardous condition.
3. Plug the grounded AC line cord (included) into the IEC 320 connector of the NetWayG unit *(Fig. 2d, pg. 4)*.
   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.
   Do not connect to a receptacle controlled by a switch.
4. Connect structured cables from port marked [IN] on NetWayG to the corresponding inputs of an ethernet switch or video server *(Fig. 2b, pg. 4, Fig. 5, pg. 6)*.
   Note: All cabling and wire must be UL Listed and/or Recognized wire suitable for their application.
5. Connect structured cables from port marked [OUT] on NetWayG to PoE compliant camera/edge devices *(Fig. 2a, pg. 4, Fig. 5, pg. 6)*.
6. When the use of stand-by batteries is required, they must be sealed lead acid or gel type. Connect four (4) 12VDC batteries in series to terminals marked [+ BAT –] *(Fig. 2e, pg. 4),* carefully observing polarity.
   Note: When batteries are not used a loss of AC will result in a loss of output voltage.
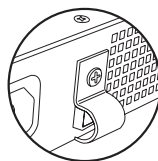
Fig. 2
NetWay81G/81GL/NetWay81GP:

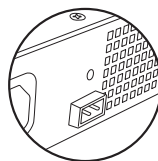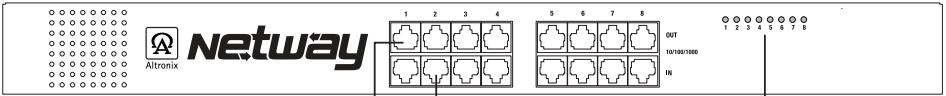**NetWay81G/81GL/81GP - Front Panel**

2a   2b   2c

NetWay81G/81GL/81GP - Rear Panel

2d   2e

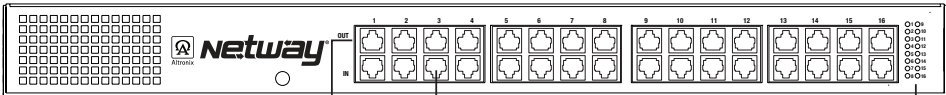*2a*   OUT 1-8 (1-16): Structured cable to PoE compliant cameras/edge devices.
2b   IN 1-8 (1-16): Structured cable to ethernet switch or video server.
2c   LEDs 1-8 (1-16): Port status LEDs.
2d   IEC 320 Connector: 115/230VAC (grounded line cord included).
2e   Built-in battery charger: Charges stand-by batteries for applications requiring back-up
        (optional rack mount battery enclosure available - RE2)

NetWay161G

NetWay161G - Front Panel

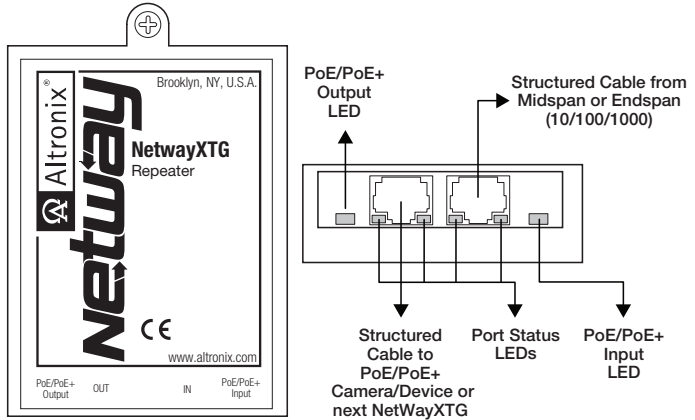2a   2b   2c

NetWay161G - Rear Panel

2d   2e

Technical Specifications:

Parameter	Description			
No. of Ports	**NetWay81G:** **NetWay81GL:** **NetWay81GP:** **NetWay161G:**	Eight (8) PoE/PoE+ Ports (10/100/1000 Mbps). Eight (8) PoE/PoE+/Hi-PoE Ports (10/100/1000 Mbps). Eight (8) PoE/PoE+/Hi PoE Ports (10/100/1000 Mbps). Sixteen (16) PoE/PoE+ Ports (10/100/1000 Mbps).		
Input Power Requirements	**NetWay81G, NetWay81GL:** **NetWay81GP, NetWay161G:**	115VAC, 60Hz, 3.25A or 230VAC, 50/60Hz, 2.0A. 115VAC, 60Hz, 5.5A or 230VAC, 50/60Hz, 3.0A.		
Indicators	Port Status LEDs.			
Environmental Conditions	Operating Ambient Temperature: − 20ºC to 50ºC (− 4ºF to 122ºF). Relative Humidity: 85%, +/− 5%. Storage Temperature: − 20ºC to 70ºC (− 4ºF to 158ºF). Operating Altitude: Up to 2,000m.			
Weights (approx.)	**NetWay81G**	**NetWay81GL**	**NetWay81GP**	**NetWay161G**

	Product Weight:
	  6.06 lb. (2.75 kg).
	Shipping Weight:
	  8.0 lb. (3.63 kg).
		Product Weight:
		  6.06 lb. (2.75 kg).
		Shipping Weight:
		  8.0 lb. (3.63 kg).
			Product Weight:
			  6.06 lb. (2.75 kg).
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			  8.0 lb. (3.63 kg).
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				  6.06 lb. (2.75 kg).
				Shipping Weight:
				  8.0 lb. (3.63 kg).

Fig. 3 - **NetWayXTG**

Installing a NetWayXTG Repeater Module:

NetWayXTG will work with PoE/PoE+ devices.

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

1. Mount NetWayXTG in desired location utilizing the mounting hole *(Fig. 3a, pg. 5)*.
   Use a proper fastener and/or wall anchor when securing NetWayXTG to the wall.
2. Connect structured cable from port marked [OUT] on NetWayG to port marked [IN]
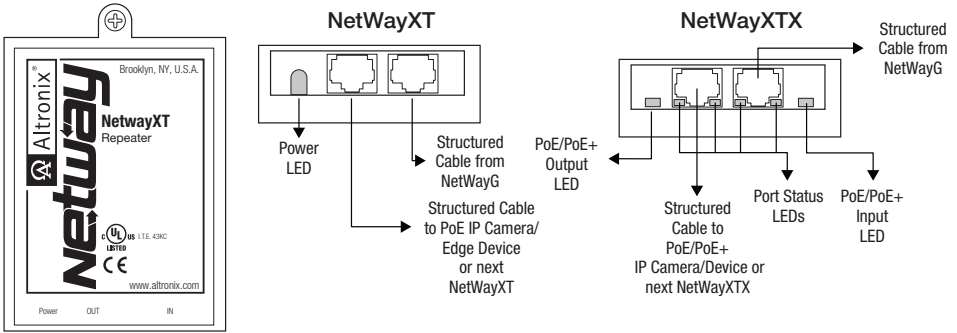   on the NetWayXTG *(Fig. 3b, pg. 5)*.
3. Connect structured cable from port marked [OUT] on NetWayXTG to the PoE camera/ device or next
   NetWayXTG repeater *(Fig. 3b, pg. 5, Fig. 4, pg. 6)*.
4. Port status LEDs will illuminate on NetWayXTG indicating the port is operational
   (Fig. 3a, pg. 5, refer to Port LED definitions below).

Port LED Definitions for NetWayXTG Repeater:

Status	PoE/PoE+ Output LED	Green LED	Yellow LED
OFF	No PoE/PoE+ Output	Indicates no link.	Indicates no link
ON	Normal PoE/PoE+ Output	Indicates 1G link	Indicates 10/100 link
Blinking	–	Indicates 1G activity	Indicates 10/100 activity

Fig. 4 - **NetWayXT/NetWayXTX**

NetWayXT and NetWayXTX will work if the Midspan is set for 15W or 30W, but not 60W.

Installing a NetWayXT/NetWayXTX Repeater Module:

NetWayXT will work only with PoE devices. NetWayXTX will work with PoE/PoE+ devices.

1. Mount NetWayXT/NetWayXTX in desired location utilizing the mounting hole *(Fig. 4, pg. 6)*.
   Use a proper fastener and/or wall anchor when securing NetWayXT/NetWayXTX to the wall.
2. Connect structured cable from port marked [OUT] on NetWay81GL to port marked [IN] on the
   NetWayXT/NetWayXTX *(Fig. 4, pg. 6)*.
3. Connect structured cable from port marked [OUT] on NetWayXT/NetWayXTX to the PoE/PoE+ camera/
   edge device or next NetWayXT/NetWayXTX repeater *(Fig. 4, pg. 6)*.
4. Port status LEDs will illuminate on NetWayXT/NetWayXTX indicating the port is operational
   (refer to LED Definitions, pg. 6).
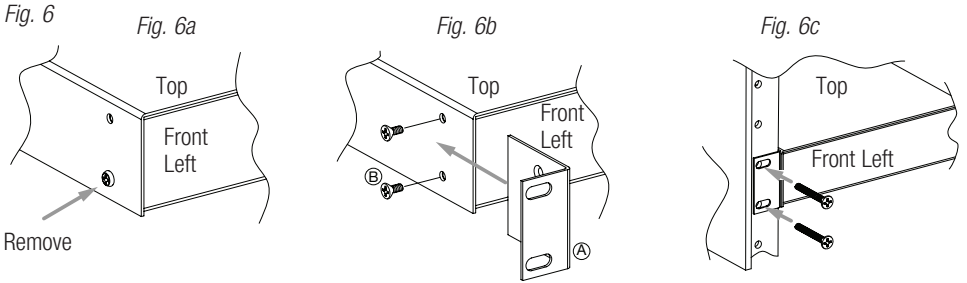5. Power LED will illuminate indicating 12VDC output.

Port LED Definitions for NetWayXT and NetWayXTX Repeaters:

Status	NetWayXT		NetWayXTX		
	Green LED	**Yellow LED**	**PoE/PoE+ Output LED**	**PoE/PoE+ Input LED**	**Yellow LED**
OFF	Indicates it is connected as 10Base-T or no link.	Indicates no link.	No PoE/PoE+ Output	No PoE/PoE+ Input	Indicates no link.
ON	Indicates it is connected as 100Base-TX.	Indicates a link.	Normal PoE/PoE+ Output	PoE/PoE+ Input	Indicates a link.
Blinking	–	Indicates activity.	–	–	Indicates activity.

NetWayG Typical Applications:

NetWay81G is shown (similar to NetWay81GL and NetWay81GP).
NetWay161G is similar with twice as many ports

Fig. 5

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of an insulated DANGEROUS VOLTAGE within the product's 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
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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.
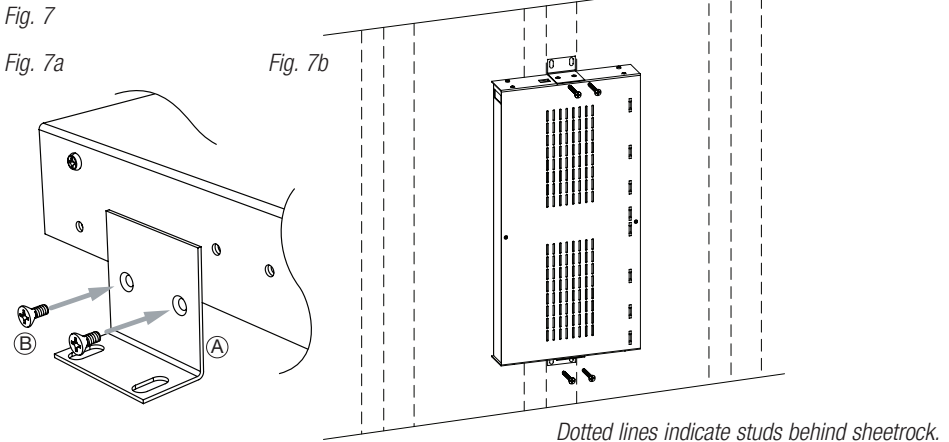
Mounting Options:
Rack Mount Installation
1. Remove and discard factory installed screws from both sides of rack chassis *(Fig. 6a)*.
2. Install mounting brackets (A) on the left and right side of rack chassis using the four (4) flat head screws (B) *(included) (Fig. 6b)*.
3. Place unit into desired EIA 19" rack position and secure with mounting screws *(not included) (Fig. 6c)*.
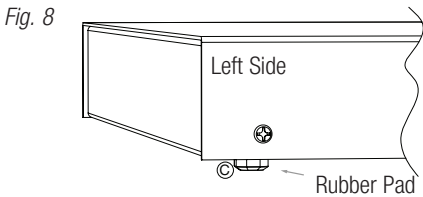
Fig. 6

Fig. 6a

Remove

Fig. 6b

Fig. 6c

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. 7a)*.
2. Place unit at desired location and secure with #6 size screws or larger *(not included) (Fig. 7b)*.
   Caution: It is necessary to make sure mounting screws are securely fastened to a beam when installing the unit vertically.

Fig. 7

Fig. 7a   *Fig. 7b*

*Dotted lines indicate studs behind sheetrock.*

Shelf Installation
1. Position and affix rubber pads (C) (included) at each corner on the bottom of the unit *(Fig. 8)*.
2. Place unit in desired location.

Fig. 8

Rubber Pad

Mounting Hardware (Included)**:**

 Ⓐ Two (2) mounting brackets

⊕ ▥ Ⓑ Six (6) flat head screws for mounting brackets.

● Ⓒ Four (4) rubber pads.