



Power over the Ethernet

NetWay G Series

PoE Managed Midspan Solutions for
Standard Network Infrastructure

Models Include:

NetWay8G

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

NetWay8GP

- Eight (8) Port Managed Hi-PoE Midspan Injector
- 480W total power

NetWay16G

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

Installation Guide



DOC#: NETG Rev. 050719



More than just power.™

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

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Overview:

Altronix NetWay8G, NetWay8GP and NetWay16G Networked Managed 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 and embedded LINQ Technology to monitor, control, and report power and diagnostics from anywhere.

Features:

Agency Listings:

- **UL 60950-1** Information Technology Equipment.
- **CE** European Conformity.

Input:

- **NetWay8G:** 115VAC, 60Hz, 3.25A or 230VAC, 50/60Hz, 2.0A.
- **NetWay8GP/16G:** 115VAC, 60Hz, 5.5A or 230VAC, 50/60Hz, 3.0A.

Power:

- Unit supplies PoE output voltage (55V).
Total power:
NetWay8G (up to 30W per port): 240W.
NetWay8GP (up to 60W per port): 480W.
NetWay16G (up to 30W per port): 480W.
- IEEE 802.3af and IEEE 802.3at compliant (PoE/PoE+/60W).
- Short circuit protection.

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.

Functions:

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

Battery Backup:

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

LINQ Technology:

- SSL (Secure Socket Layer) security encryption.
- User level security.
- Built-in IP management allows for remote camera reset and monitoring.
- Provides local and/or remote access to critical information via LAN/WAN
- Email and Windows Dashboard Alert notifications report real-time diagnostics.
- Event log tracks history.

Accessories:

NetWayXT:

- PoE repeater module extends data range 100m.

NetWayXTX:

- PoE/PoE+ repeater module extends data range 100m.

RE2:

- Rack Mount Battery Enclosure accommodates up to four (4) 12VDC/7AH batteries

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*).

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 104°F (40°C).
- 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. 2g, pg. 4*).

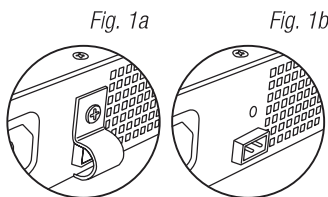
Plug unit into a reliable earth grounded socket. When using multiple units, the sum of the individual name plate ratings should not exceed the supply circuit rating.

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. 4, 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. 3, pg. 5*).

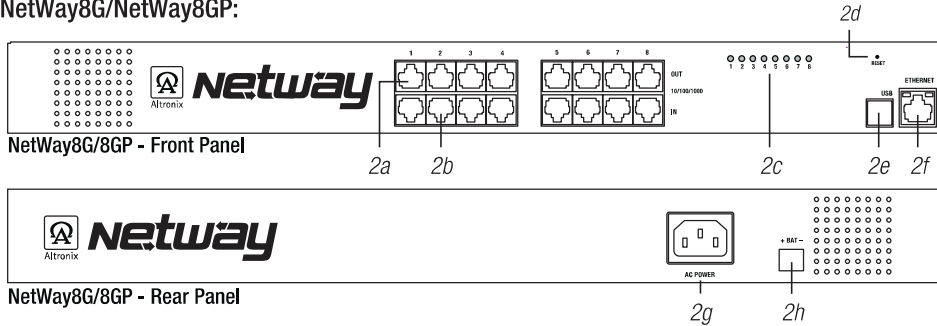


Installation Instructions (cont'd.):

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. 2h, pg. 4), carefully observing polarity.
Note: When batteries are not used a loss of AC will result in a loss of output voltage.
7. **Manual Reset NetWay8G/NetWay8GP:**
 Depress button for 3 seconds via pin hole marked RESET on front of unit.
Manual Reset NetWay16G: This will require opening the unit.
CAUTION: Disconnect 115/230VAC prior to opening unit. To manage network settings via USB, or reset to factory default settings via reset button proceed to open top of enclosure chassis removing screws (set screws aside). Plug laptop into USB port to manage and review network settings via Altronix Dashboard as needed. To restore to factory default via manual reset, proceed to open unit as described above and depress reset button (for 3 secs.) located on board. Close enclosure with screws and power unit once again.

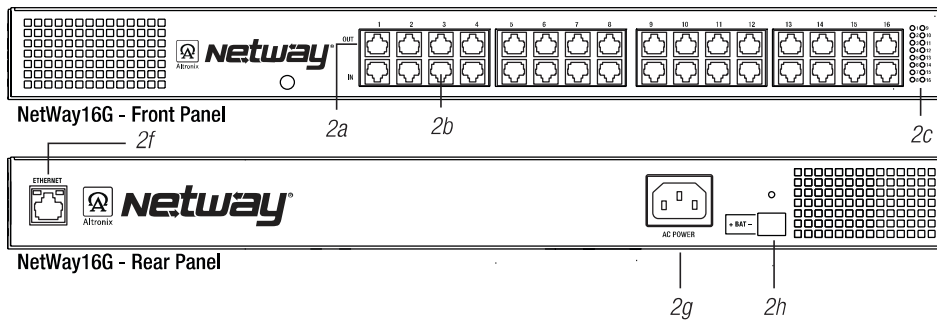
Fig. 2

NetWay8G/NetWay8GP:



- 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 LED(s) 1-8 (1-16): Port status LEDs.
- 2d Manual Reset: Restores unit to factory settings.
NetWay8G/NetWay8GP: Located on front of unit.
NetWay16G: Located internal (refer to installation instructions above)
- 2e USB Port
NetWay8G/NetWay8GP: Located on front of unit.
NetWay16G: Located internal (refer to installation instructions above)
- 2f Ethernet Port
- 2g IEC 320 Connector: 115/230VAC (grounded line cord included).
- 2h Built-in battery charger: Charges stand-by batteries for applications requiring back-up,
(optional rack mount battery enclosure available - RE2)

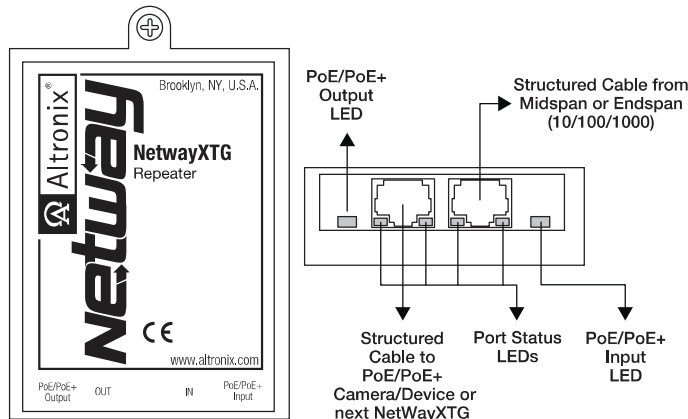
NetWay16G



Technical Specifications:

Parameter	Description		
No. of Ports	NetWay8G:	Eight (8) PoE/PoE+ Ports (10/100/1000 Mbps).	
	NetWay8GP:	Eight (8) PoE/PoE+/Hi-PoE Ports (10/100/1000 Mbps).	
	NetWay16G:	Sixteen (16) PoE/PoE+ Ports (10/100/1000 Mbps).	
Input Power Requirements	NetWay8G:	115VAC, 60Hz, 3.25A or 230VAC, 50/60Hz, 2.0A.	
	NetWay8GP:	115VAC, 60Hz, 5.5A or 230VAC, 50/60Hz, 3.0A.	
	NetWay16G:	115VAC, 60Hz, 5.5A or 230VAC, 50/60Hz, 3.0A.	
Indicators	Port Status LEDs.		
Environmental Conditions	Operating Ambient Temperature:		– 20°C to 50°C (– 4°F to 122°F).
	Relative Humidity:		85%, +/- 5%.
	Storage Temperature:		– 20°C to 70°C (– 4°F to 158°F).
	Operating Altitude:		Up to 2,000m.
Weights (approx.)	NetWay8G	NetWay8GP	NetWay16G
	Product Weight: 6.06 lb (2.75 kg).	Product Weight: 6.06 lb (2.75 kg).	Product Weight: 6.06 lb (2.75 kg).
	Shipping Weight: 8.0 lb. (3.63 kg).	Shipping Weight: 8.0 lb. (3.63 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

NetWay8G is shown (similar to NetWay8GP). NetWay16G is similar with twice as many ports

The diagram illustrates the front panel of the NetWay8G switch with various connections:

- Top Left:** Two PoE cameras connected to ports 1 and 2. A Pace PoE Transceiver is connected to port 3, and a Pace PoE Receiver is connected to port 4. A label "Pace Long Range Ethernet Adapters Extends Ethernet approx. 500m" is present.
- Top Center:** A NetWayXT/NetWayXTX module connected to ports 5 and 6, with a label "NetWayXT/NetWayXTX Extends Ethernet 100m".
- Top Right:** A PoE/PoE+/Hi-PoE Camera connected to port 7. A HID Solo module is connected to port 8, with a label "HID Solo". A Card Reader is connected to the HID Solo, and a Strike device is connected to the Card Reader. A label "Typical UL2994 Application:" is present.
- Bottom Left:** An Ethernet Switch connected to ports 9 and 10.
- Bottom Center:** An NVR/Network Server connected to port 11.
- Bottom Right:** A laptop connected to the Ethernet switch, with a label "Programming and Status".



Configuring NetWayG for Network Connection

Please be sure to visit altronix.com for latest firmware and installation instructions

Factory Default Settings

- IP Address: 192.168.168.168
- User Name: admin
- Password: admin

1. Set the static IP address for the laptop to be used for programming to the same network IP address as the NetWayG. The default address of the NetWayG is 192.168.168.168, E.I. 192.168.168.200.
2. Connect one end of the network cable to the network jack on the NetWayG and the other to the network connection of the laptop.
3. Open a browser on the computer and enter "192.168.168.168" into the address bar. A dialog box Authentication Required will appear requesting both user name and password. Enter the default values here. Click on the button labeled **Log In**.
4. The status page of the NetWayG will appear. Click on the tab labeled **Network Settings**. This will open the Network Setting screen. In this screen the MAC Address of the NetWayG module will be found along with the Network Settings and Email Settings.

Network Settings:

In the IP Address Method field select the method that the IP Address for the NetWayG will be obtained (STATIC or DHCP), then follow the appropriate steps.

Static:

- A. IP Address: Enter the IP address assigned to the NetWayG by the network administrator.
- B. Subnet Mask: Enter the Subnet of the network.
- C. Gateway: Enter the TCP/IP gateway of the network access point (router) being used (gateway configuration is required to properly receive emails from the device).
- D. HTTP Port: Enter the HTTP port number assigned to the NetWayG module by the network administrator to allow remote access and monitoring. The default inbound port setting is 80. HTTP is not encrypted and unsecure. Even though HTTP can be used for remote access, it is recommended primarily for use with LAN connections.
- E. HTTPS Port: Enter the HTTPS port number assigned to the NetWayG module by the network administrator to allow remote access and monitoring. The default inbound port setting is 443. Being encrypted and more secure, HTTPS is highly recommended for remote access.
- F. Click the button labeled **Submit Network Settings**. A dialog box will display “New network settings will take effect after the server is rebooted”. Click **OK**.

DHCP:

- A. After selecting DHCP in the IP Address Method field click the button labeled **Submit Network Settings**. A dialog box will display “New network settings will take effect after the server is rebooted”. Click **OK**. Next, click on the button labeled **Reboot Server**. After rebooting the NetWayG will be set in the DHCP mode. The IP address will be assigned by the router when the NetWayG is connected to the network. It is recommended to have the assigned IP Address reserved to ensure continued access (see the network administrator).
- B. Subnet Mask: When operating in DHCP, the router will assign the subnet mask values.
- C. Gateway: Enter the TCP/IP gateway of the network access point (router) being used.
- D. HTTP Port: Enter the HTTP port number assigned to the NetWayG module by the network administrator to allow remote access and monitoring. The default inbound port setting is 80. HTTP is not encrypted and unsecure. Even though HTTP can be used for remote access, it is recommended primarily for use with LAN connections.

Secure Network Setup (HTTPS):

In order to setup HTTPS for a Secure Network Connection, a Valid Certificate and Key must be used. Certificates and Key should be in a “.PEM” format. Self Certifications should only be used for testing purposes as no actual authentication is being performed. In a Self-Certified mode, the connection will still state that it is unsecure. How to upload Certificate and Key to setup HTTPS:

- 1. Open Tab Labeled “Security”
- 2. Select Tab Labeled “Email/SSL”
- 3. Scroll to bottom under “SSL Settings”
- 4. Click “Select Certificate”
- 5. Browse and select valid Certificate to upload from server
- 6. Click “Select Key”
- 7. Browse and select valid Key to upload from server
- 8. Click “Submit Files”

Once the Certificate and Key is uploaded successfully you can proceed with setting up HTTPS in Network Settings.

- A. HTTPS Port: Enter the HTTPS port number assigned to the NetWayG module by the network administrator to allow remote access and monitoring. The default inbound port setting is 443. Being encrypted and more secure, HTTPS is highly recommended for remote access.
- B. Click the button labeled **Submit Network Settings**. A dialog box will display “New network settings will take effect after the server is rebooted”. Click **OK**.

Mounting Options:

Rack Mount Installation

1. Remove and discard factory installed screws from both sides of rack chassis (Fig. 5a).
2. Install mounting brackets (A) on the left and right side of rack chassis using the four (4) flat head screws (B) (included) (Fig. 5b).
3. Place unit into desired EIA 19" rack position and secure with mounting screws (not included) (Fig. 5c).

Fig. 5

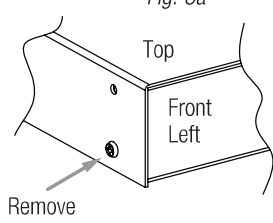


Fig. 5b

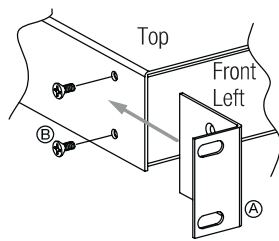
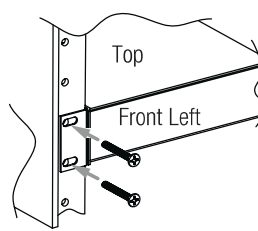


Fig. 5c



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. 6a).
2. Place unit at desired location and secure with #6 size screws or larger (not included) (Fig. 6b).

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

Fig. 6

Fig. 6a

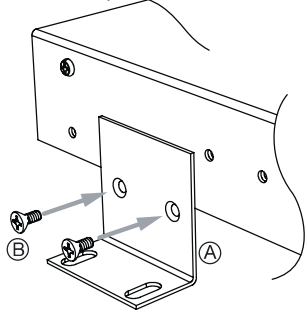
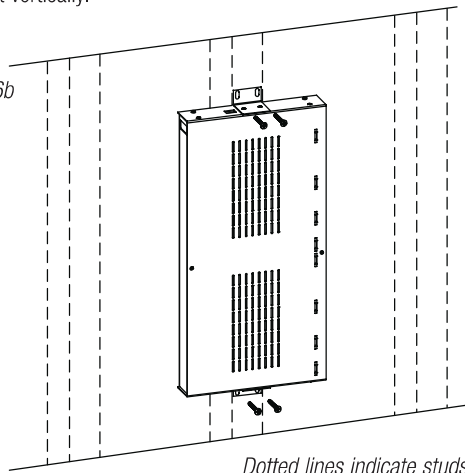


Fig. 6b

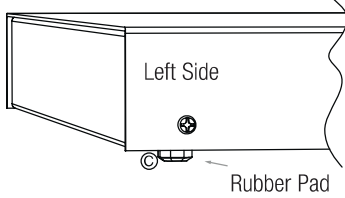


Dotted lines indicate studs behind sheetrock.

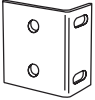
Shelf Installation

1. Position and affix rubber pads (C) (included) at each corner on the bottom of the unit (Fig. 7).
2. Place unit in desired location.

Fig. 7



Mounting Hardware (Included):

-  (A) Two (2) mounting brackets
-  Six (6) flat head screws for mounting brackets.
-  Four (4) rubber pads.

Altronix is not responsible for any typographical errors.

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