



Fiber Solution

# NetWaySP4

- 4-port Fiber Optic Transceiver for Composite Fiber (Powered) Cable

## Installation Guide



DOC#: NETWAYSP Rev. 020217



More than just power.™

Installing Company: \_\_\_\_\_ Service Rep. Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone #: \_\_\_\_\_

## Overview:

Altronix NetWaySP4/ Fiber Optic Transceiver with optional PoE power provides up four (4) 1Gb SFP ports and four (4) ports for up to 120W per port to be transmitted over composite fiber (powered) cable (fiber + copper combined) to NetWay Spectrum PoE+ Hardened Switches. NetWaySP4 can be used for standard fiber cable applications as well.

## Specifications:

### Agency Listings:

- **UL/cUL** UL 60950-1 (Information Technology Equipment).
- **CE** European Conformity.

### Input:

- Options:
  - 48-56V: UL Listed ITE power supply i.e. VertiLine563 (2 x 56V / 150W ports).
  - PoE+ (30W) or Hi-PoE (60W) (midspan/endspan)
- Four (4) RJ45 inputs up to 60W max.

### Power:

- Four (4) outputs.\*  
(All output power is dependent on input).
- IEEE 802.3af and IEEE 802.3at compliant (PoE/PoE+).
- Short circuit protection.

### Environmental:

- Refer to *Environmental Conditions* on page 3.

### Fiber Ports:

- Four (4) Gigabit SFP ports.
- Use with SFP module 1000Base-X (1Gb), compliant to Class 1 laser product (not included).

\* Outputs are Class 2 Power-Limited: when powered by PoE, PoE+, Hi-PoE unit or UL Listed power-limited supply. If supplied by a non-limited power source, the output of the device must be considered as a non-limited power source. For non-limited power sources, the unit must be installed in a restricted access, and the need for additional protective circuitry and/or an appropriate fire enclosure for the products supplied by this device, shall be determined in the installation of the device.

### Ethernet:

- Four (4) ports.
- Wire type: 4-pair CAT5e and higher.
- Connectivity: RJ45, auto-crossover.
- Speed: Gigabit (1000Mbps).
- Distance: up to 100m.

### Compatible PoE

#### Hardened Switches and Accessories:

- |               |  |
|---------------|--|
| NetWaySP3WPN: | 3-port PoE Hardened Switch with (1) SFP port.  |
| NetWay4EWPN:  | 4-port PoE Hardened Switch with (1) SFP port.  |
| NetWay4E1WPN: | 4-port PoE Hardened Switch with (1) SFP port.  |
| NetWaySP4WPN: | 4-port PoE Hardened Switch with (2) SFP ports. |
| NetWaySP8WPN: | 8-port PoE Hardened Switch with (2) SFP ports. |

## Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction. NetWaySP4 is not intended to be connected to outside plant leads. This product is for indoor use only and must be installed within the protected premises.

1. Attach mounting brackets to unit for rack or wall mount installation (*Fig. 2 or 4, pg. 5*).

Affix rubber pads to unit for shelf installation (*Fig. 4, pg. 5*).

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. Input Power Options:

- Connect structured cable from ethernet (midspan or endspan) device to RJ45 jack marked [Ethernet] (*Fig. 1, pg. 4*).

- Connect 48-56V UL Listed ITE power supply (rated minimum ambient temperature of 50°C, or the installation of the device must conform to the rated ambient temperature of the power supply) to terminals marked [- In +, 56VDC] (*Fig. 1 pg. 4*).

4. Daisy-chaining inputs: Connect terminals marked [- Pass +, 56VDC] to the next input terminals marked [- In +, 56VDC] (*Fig. 1 pg. 4*).

5. Connect Composite (Powered) Fiber cable. Fiber portion connects to port marked [SFP 1-4], copper portion connects to output marked [OUT 56VDC, 1-4] (Fig. 1, pg. 4).
6. Connect opposite end of Composite (Powered) Fiber cable. Fiber portion connects to SFP port on NetWaySP3WPN or NetWay4EWP, copper portion connects to power input of NetWay Spectrum Hardened Switch, **carefully observing correct polarity** (Refer to NetWaySP3WPN/4WPN/8WPN / NetWay4EWP Installation Guides).

### **Recommended Altronix SFP Modules:**

Altronix P1MM, P1SM10, P1AB2K and P1GCE are hot-pluggable SFP fiber transceiver modules and are readily usable with all Altronix Spectrum fiber optic equipment for 1Gb transmission rates.

P1MM - For use with Multi-Mode Fiber for distances up to 550m.

P1SM10 - For use with Single-Mode Fiber for distances up to 10km.

P1AB2K - For use with Single Strand Single-Mode Fiber for distances up to 2km.

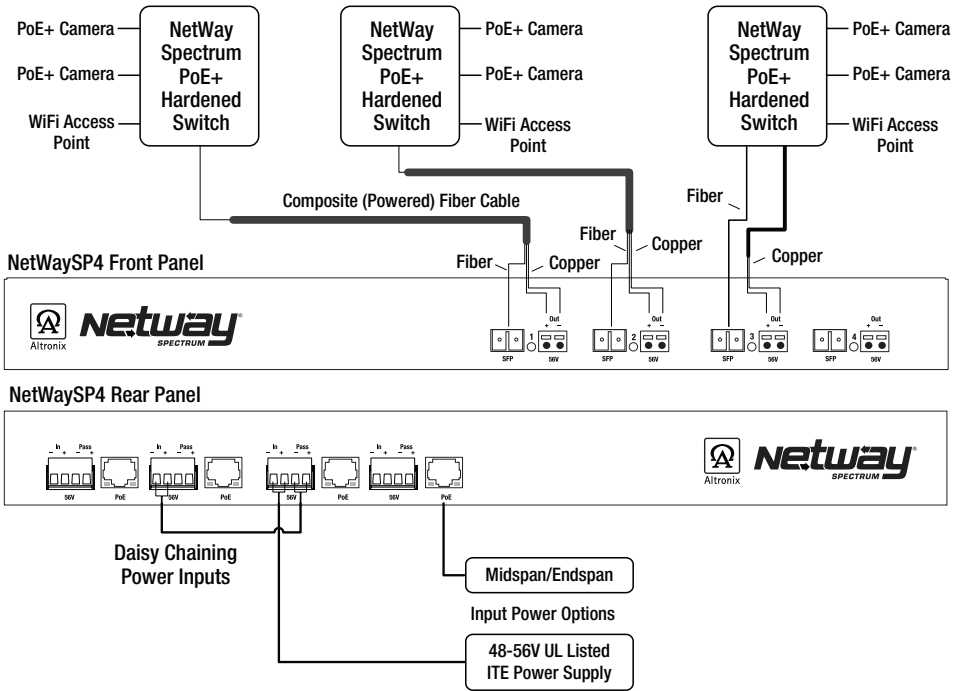
P1GCE - For use with CAT5e or better for distances up to 100m.

### **Technical Specifications:**

Parameter	Description
<b>Number of Ports</b>	Four (4) - Gigabit SFP Ports. Four (4) Gigabit (1000Mbps) ports.
<b>Power Outputs</b>	Four (4) outputs. All output power is dependent on input.
<b>Input Power Requirements</b>	- 48-56V: UL Listed ITE power supply i.e. VertiLine563 (2 x 56V / 150W ports). - PoE+ (30W) or Hi-PoE (60W) (midspan/endspan)
<b>Environmental Conditions</b>	Operating Ambient Temperature (120W): - 40°C to 50°C (- 40°F to 122°F) Relative Humidity: 85%, +/- 5% Storage Temperature: - 40°C to 85°C (- 40°F to 185°F). Operating Altitude: - 304.8 to 2,000m.
<b>Weights (approx.)</b>	Product: 2.55 lb. (1.16 kg)   Shipping: 4.7 lb. (2.13 kg).

# NetWaySP4 Typical Application:

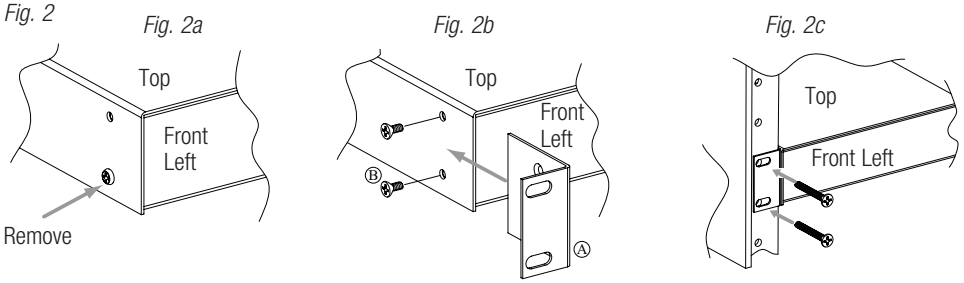
Fig. 1



## Mounting Options:

### Rack Mount Installation

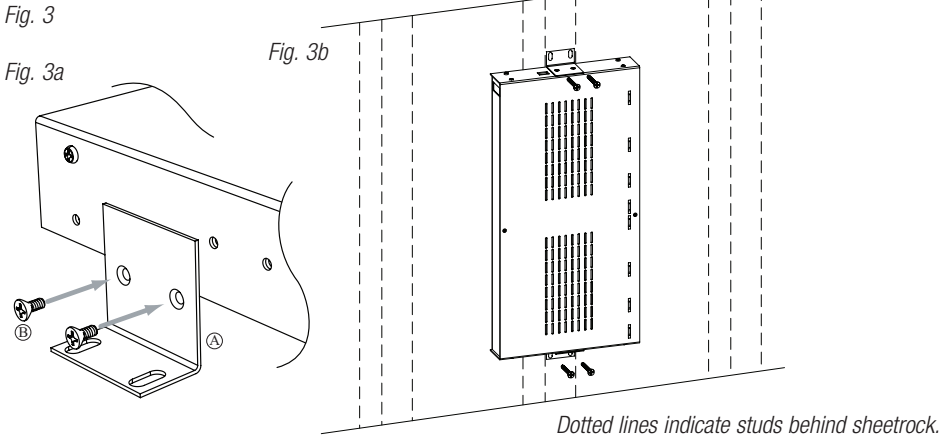
1. Remove and discard factory installed screws from both sides of rack chassis (Fig. 2a).
2. Install mounting brackets (A) on the left and right side of rack chassis using the four (4) flat head screws (B) (included) (Fig. 2b).
3. Place unit into desired EIA 19" rack position and secure with mounting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



### Wall Mount Installation

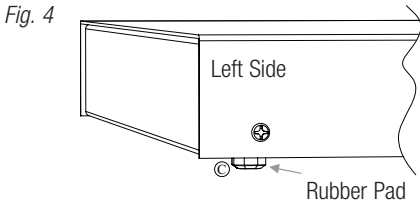
1. Install mounting brackets (A) on the left and right side of rack chassis using four (4) flat head screws (B) (included) (Fig. 3a).
2. Place unit at desired location and secure with #6 size screws or larger (not included) (Fig. 3b).

**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. 4).
2. Place unit in desired location.

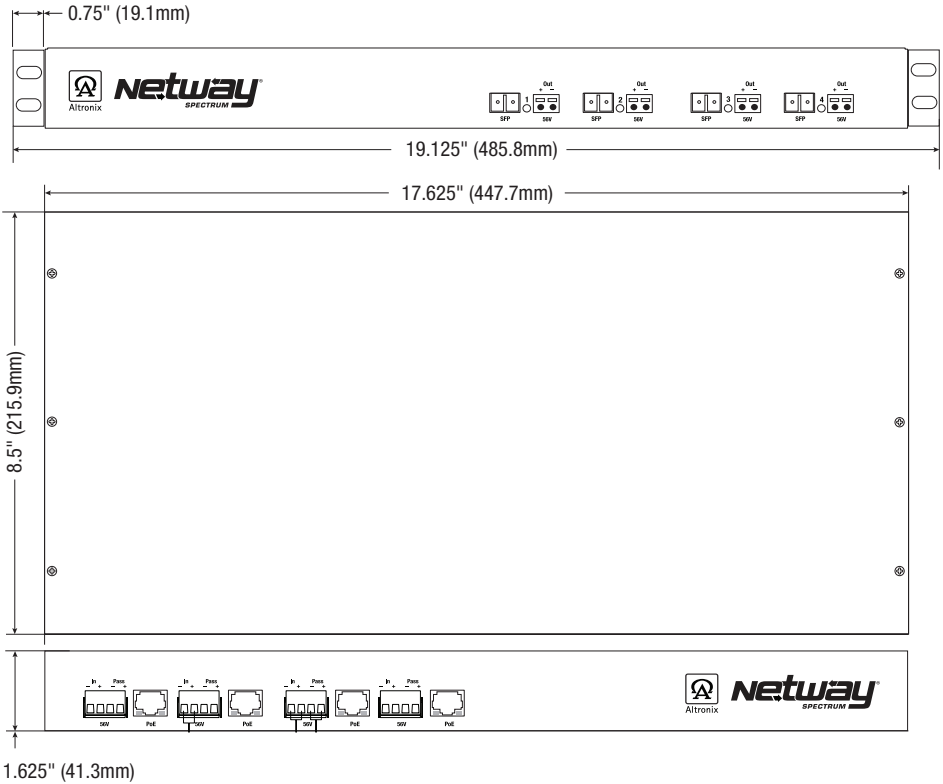



### Mounting Hardware (Included):


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


# NetWay SP4 Rack Mount Chassis

## Mechanical Drawing and Dimensions:




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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.
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**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.

## Notes:

## Notes:

Altronix is not responsible for any typographical errors.

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II NetWaySP4 G28V

