



Fiber Solution

# NetWay4E1BT3 Series

4-port Hardened 360W 802.3bt  
4PPoE Switches

## Models Include:

### NetWay4E1BTWP3

- 4-port Hardened 802.3bt 4PPoE Switch and Power Supply/Charger
- NEMA4/4X, IP66 rated Outdoor enclosure.

### NetWay4E1BTWPX3

- 4-port Hardened 802.3bt 4PPoE Switch and Power Supply/Charger
- NEMA4/4X, IP66 rated Outdoor enclosure.
- Accommodates up to four (4) 12VDC/4AH batteries.

### NetWay4E1BTX3

- 4-port Hardened 802.3bt 4PPoE Switch and Power Supply/Charger
- NEMA1 rated Indoor enclosure.

### NetWay4E1BTPL3

- 4-port Hardened 802.3bt 4PPoE Switch and Power Supply/Charger
- Backplane version.

## Installation Guide



DOC#: NetWay4E1BT3 Rev. 021224



More than just power.™

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

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

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## Overview:

Altronix NetWay4E1BT3 Series Hardened 802.3bt 4PPoE Switches are equipped with one (1) 1Gb SFP port and four (4) POE IEEE802.3af/3at/3bt PoE ports rated at 90W each, with 360W total power.

For network managed switches, refer to NetWay4EBT3 Series.

## Features:

### Agency Listings:

- CE European Conformity.

### Input:

- 115VAC, 60Hz, 3.5A or 230VAC, 50/60Hz, 2A.

### Power Output:

- Four (4) 10/100/1000 Mbps Ethernet ports rated at 90W each (360W total power).
- IEEE 802.3af, 802.3at, 802.3bt compliant.

### SFP Ports:

- One (1) Gigabit SFP port.

### Ethernet Ports:

- Four (4) 10/100/1000 Mbps ports.
- Connectivity: RJ45, auto-crossover.
- Wire type: 4-pair CAT5e or higher structured cable.
- Speed: 10/100/1000 Mbps, half/full duplex, auto negotiation.

### Battery Backup

- 48VDC charging circuit charges sealed lead acid\* or gel type\* batteries.
- Automatic switch over to stand-by battery when AC fails.

### Indicators (LED):

- Individual PoE On LEDs for each port.
- Individual IP Link status, 10/100 Base-T/active LEDs for each port.
- ALOS LED indicates fiber connection for SFP port.
- Heartbeat LED indicates proper operation of the unit.

### Mechanical:

#### NetWay4E1BTPL3:

- Dimensions (H x W x D approx.):  
10.75" x 8.875" x 2.375"  
(273.1mm x 225.4mm x 60.3mm).

#### NetWay4E1BTWPX3:

- NEMA4/4X, IP66 Rated enclosure for outdoor use.
- Accommodates sealed lead acid or gel type 12VDC batteries.
- Dimensions (H x W x D approx.):  
17.53" x 15.3" x 6.67"  
(445.3mm x 388.6mm x 169.4mm).

#### NetWay4E1BTWP3:

- NEMA4/4X, IP66 Rated enclosure for outdoor use.
- Dimensions (H x W x D approx.):  
13.31" x 11.31" x 5.59"  
(338.1mm x 287.3mm x 142mm).

#### NetWay4E1BTX3:

- NEMA1 Rated enclosure for indoor use
- Dimensions (H x W x D approx.):  
13.5" x 13" x 3.25" (342.9mm x 330.2mm x 83mm).

**\*CAUTION:** When using lead acid or gel type batteries, enclosure must be properly ventilated.

Battery operational temperature should be derated 10-15°C lower than manufacture's rated high temperature.

## 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.

## 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. All units should be installed by a trained service personnel.

### Installation:

#### NetWay4E1BTPL3:

1. Mount backplane in the desired location/enclosure with hardware supplied.

#### NetWay4E1BTWP3/NetWay4E1BTWPX3:

1. Remove backplane from enclosure prior to drilling. Do not discard hardware.  
**Note:** Make sure that hardware will not interfere with components of the circuit board.
2. Mark and drill desired inlets on the enclosure to facilitate wiring. Maximum NEMA type 4X rated fittings to be used are 0.5". Follow manufacturer's specifications for the appropriate size opening.

**Note:** Inlets for conduit fittings should only be made on the bottom of the enclosure.

To facilitate wire entry utilize weather-tight NEMA rated connectors (*supplied*), bushings, and cable.

3. Clean out the inside of enclosure before remounting circuit boards/backplane.
4. Mounting NEMA4/4X rated enclosure (*Enclosure Dimensions, pg. 9, 10*):

**Wall mount:** Mount unit in desired location. Mark and drill holes to line up with the top and bottom hole of the enclosure flange. Secure enclosure with appropriate fasteners (e. g. screws and anchors; bolts and locking nuts, etc.) that are compatible with mounting surface and are of sufficient length/construction to ensure a secure mount (*Fig. 2, pg. 7*).


**Pole Mount:** Refer to *Fig. 3 - 6, pg. 7*.

5. Mount backplane in enclosure with hardware.

#### NetWay4E1BTX3:

1. Mount unit in the desired location. Mark and predrill holes in the wall to line up with the top two keyholes in the enclosure. Install two (2) upper fasteners and screws in the wall with the screw heads protruding. Place the enclosure's upper keyholes over the two (2) upper screws; level and secure. Mark the position of the lower two (2) holes. Remove the enclosure. Drill the lower holes and install two fasteners. Place the enclosure's upper keyholes over the two (2) upper screws. Install the two (2) lower screws and make sure to tighten all screws (*Enclosure Dimensions, pg. 11*). Secure enclosure to earth ground.

### Power Connection:

1. Secure cabinet to earth ground. Connect AC power from overcurrent protective device circuit breaker (20A @ 115VAC, 60Hz, 16A @ 230VAC, 50/60Hz) to the terminals marked [L, N] on power supply board (*Fig. 3, pg. 7*). Use 14AWG or larger for all power connections (Battery, DC output, AC input). Connect ground lug  to earth or green branch wire (12AWG min.).

**Keep power-limited wiring separate from non power-limited wiring by utilizing separate knockouts/inlets. Minimum 0.25" spacing must be provided.**

**CAUTION:** Do not touch exposed metal parts. Shut branch circuit power before installing or servicing equipment. There are no user serviceable parts inside. Refer installation and servicing to qualified service personnel.

### Input/Data Connections:

1. Connect structured cables from port marked [Port 1] to [Port 4] on NetWay unit to PoE compliant cameras/edge devices (*Fig. 1, pg. 6*).
2. Insert SFP module into port marked [SFP], then connect cable to the SFP module on NetWay4E1BTB to the corresponding input of an SFP switch (*Fig. 1, pg. 6*).

### Battery Backup:

1. Connect four (4) 12V batteries or two (2) 24V batteries wired in series to terminals marked [BAT – BAT +] (*Fig. 1 pg. 6*), carefully observing polarity. When use of stand-by batteries is desired, they must be lead acid or gel type. If batteries are housed in a weather-proof enclosure (NetWay4E1BTWP3, NetWay4E1BTWPX3), it must be properly ventilated. Use Altronix Vent2 kit.

**Note:** When batteries are not used, a loss of AC will result in the loss of output voltage.

**For outdoor battery backup, battery enclosure must have sufficient ventilation.**

**Battery operational temperature should be derated 10-15°C lower than manufacture's rated high temperature.**

### Security:

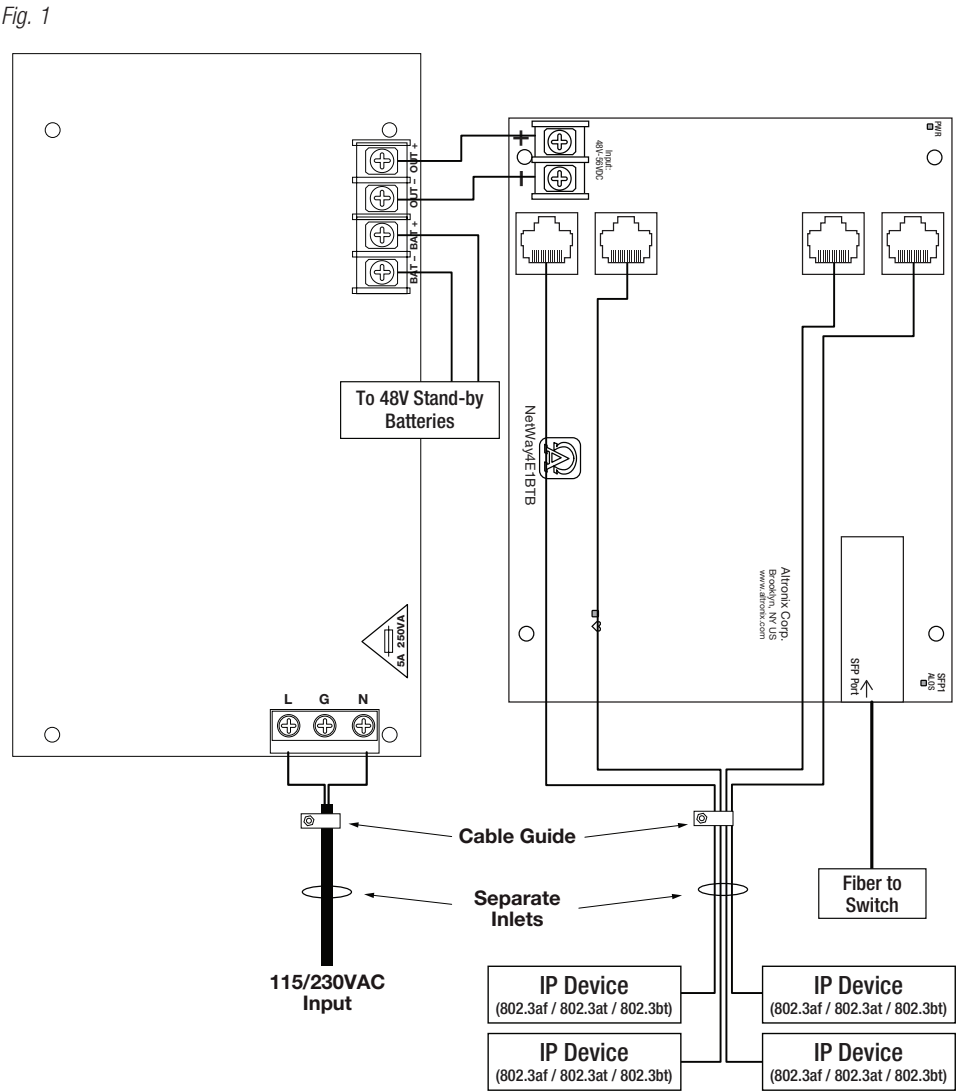
Please ensure that the cover is secured with:

Key lock and screws for **NetWay4E1BTX3**, Security Bolt for **NetWay4E1BTWP3** and **NetWay4E1BTWPX3**.

## Technical Specifications:

Parameter	Description		
Number of Ports	Four (4) 10/100/1000 Mbps Ethernet ports rated at 90W each. IEEE 802.3af, 802.3at, 802.3bt compliant. One (1) Gigabit SFP Port.		
Input Power Requirements	115VAC, 60Hz, 3.5A or 230VAC, 50/60Hz, 2A.		
Environmental Conditions	Operating Ambient Temperature: <b>360W:</b> – 30°C to 70°C (– 22°F to 158°F) <b>240W:</b> – 30°C to 75°C (– 22°F to 167°F) Storage Temperature: – 30°C to 85°C (– 22°F to 185°F) Relative Humidity: 85%, +/- 5% Operating Altitude: – 304.8 to 2,000m		
Weights (approx.)	Model	Product Weight	Shipping Weight
	NetWay4E1BTWP3	10.5 lb. (4.76 kg)	11.9 lb. (5.4 kg)
	NetWay4E1BTWPX3	15 lb. (6.8 kg)	17.5 lb. (7.9kg)
	NetWay4E1BTX3	6.65 lb. (3.02 kg)	7.55 lb. (3.42kg)
	NetWay4E1BTPL3	2.6 lb. (1.18 kg)	4.0 lb. (1.81kg)

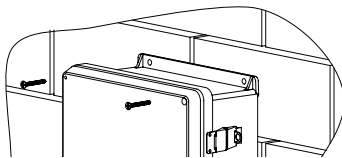
Typical Applications:



## Wall Mount Installation

1. Place unit at desired location and secure with mounting screws *(not included)* (Fig. 2, pg. 7).

Fig. 2



## Pole Mounting Using Optional Pole Mount Kit PMK1 (NetWay4E1BTWP3) or PMK2 (NetWay4E1BTWPX3):

This installation should be made by qualified service personnel. This product contains no serviceable parts. PMK1 and PMK2 outdoor pole mount kits are designed to simplify the installation of Altronix outdoor rated power supplies and accessories housed in models WP1, WP2, WP3 and WP4 NEMA rated enclosures. PMK1 and PMK2 can be mounted on 2" to 8" (50.8mm to 203.2mm) diameter round or 5" (127mm) square poles. Brackets are designed for use with the Wormgear Quick Release Straps (two included).

1. Thread one (1) wormgear quick release strap through the slots on the back of a mounting bracket (Fig. 3, pg. 7).
2. Once the desired height of the top Pole Mount bracket is achieved, tighten the straps down by sliding open end of the strap through the locking mechanism on the strap, then tighten the screw with flat head screwdriver or 5/16" hex socket driver (Fig. 3, pg. 7 and Fig. 5, pg. 7)

Fig. 3

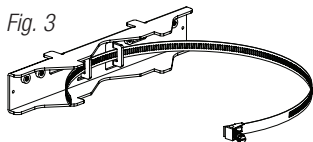


Fig. 4

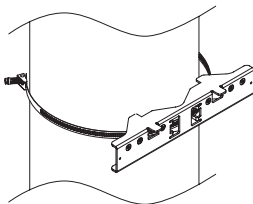
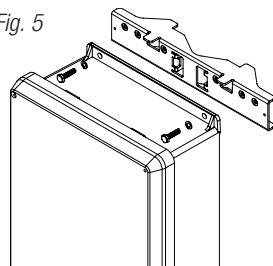


Fig. 5



3. Attach the bottom bracket to the enclosure by inserting bolts through the flange of the enclosure and into the bracket, tightening bolts with a 7/16" hex socket (Fig. 4, pg. 7).
4. Thread the second wormgear quick release strap through the slots on the back of the bottom mounting bracket (Fig. 3, pg. 7).
5. Mount enclosure onto the top bracket by inserting bolts through flange of the enclosure and into the bracket, tightening bolts with a 7/16" hex socket (Fig. 4, pg. 7).
6. Tighten the straps of the bottom bracket down by sliding the open end of the strap through the locking mechanism on the strap, then tighten screw with flat head screwdriver or 5/16" hex socket driver (Fig. 6, pg. 7).
7. Clip excess straps.

Fig. 7  
2" to 8"(50.8mm to 203.2mm)  
diameter round pole

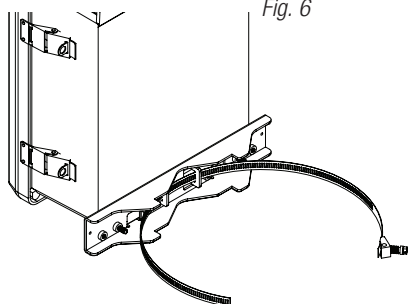
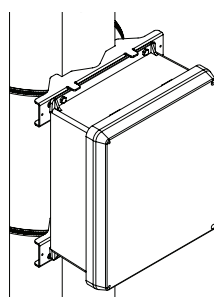


Fig. 7a  
5" (127mm) square pole

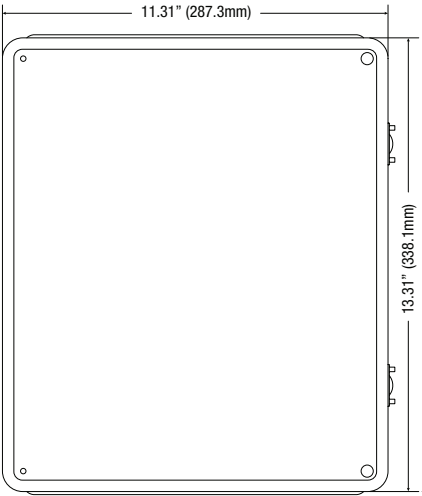


**Notes:**

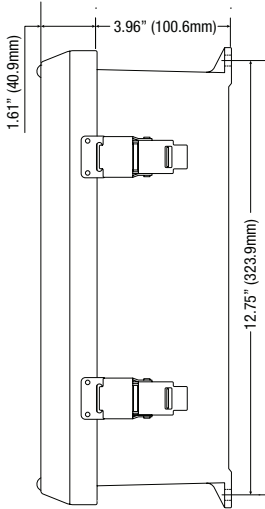


# **NetWay4E1BTWP3** **Mechanical Drawing and Dimensions (H x W x D approx.):** 13.31" x 11.31" x 5.59" (338.1mm x 287.3mm x 142mm)

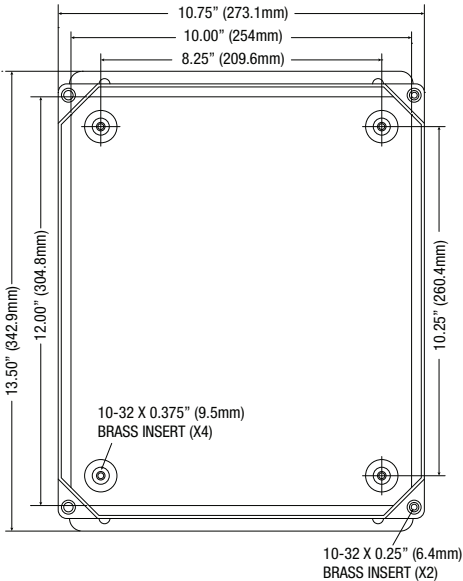
**FRONT VIEW**



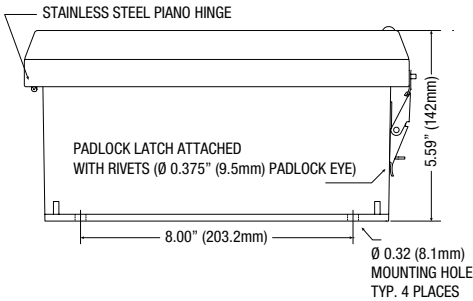
**RIGHT SIDE VIEW**



**FRONT VIEW COVER REMOVED**



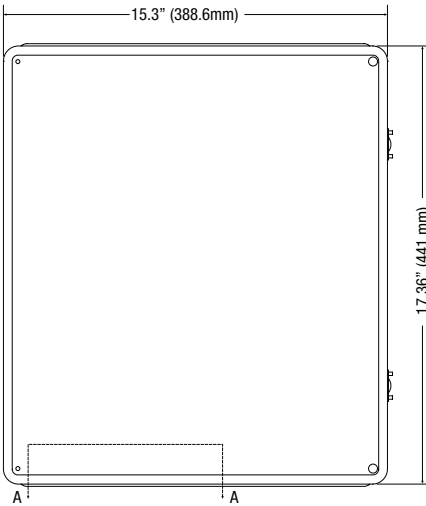
**END VIEW**



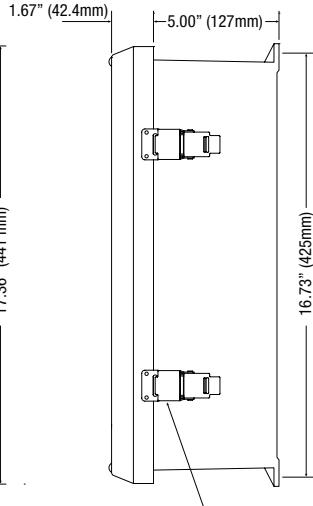
# **NetWay4E1BTWPX3** **Mechanical Drawing and Dimensions (H x W x D approx.):**

17.53" x 15.3" x 6.67" (445.3mm x 388.6mm x 169.4mm)

**FRONT VIEW**

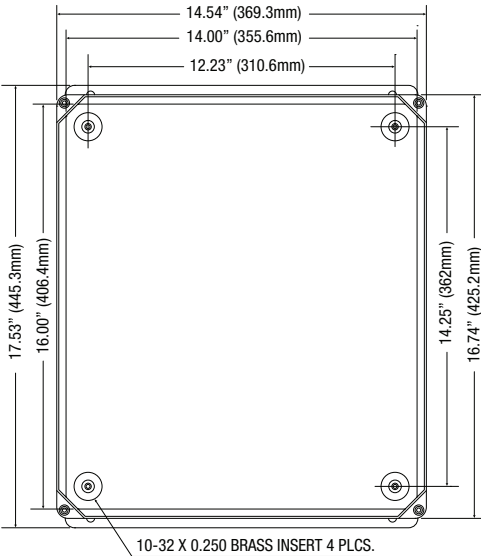


**RIGHT SIDE VIEW**



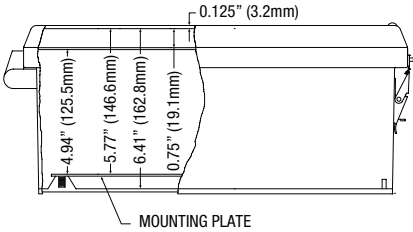
316 STAINLESS STEEL PADLOCK LATCH  
 ATTACHED WITH RIVETS. Ø 0.375 PADLOCK EYE

**FRONT VIEW COVER REMOVED**



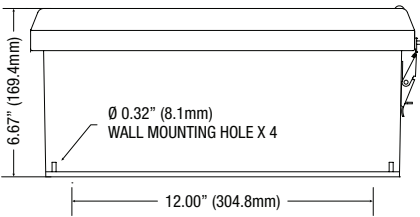
10-32 X 0.250 BRASS INSERT 4 PLCS.

**SECTION A-A**



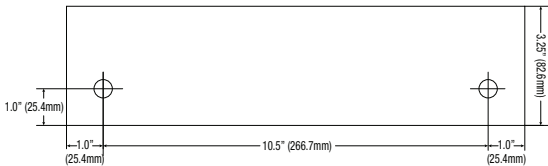
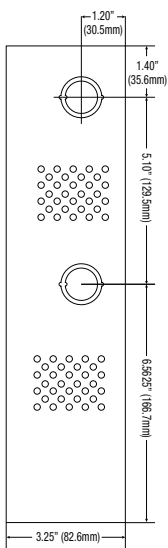
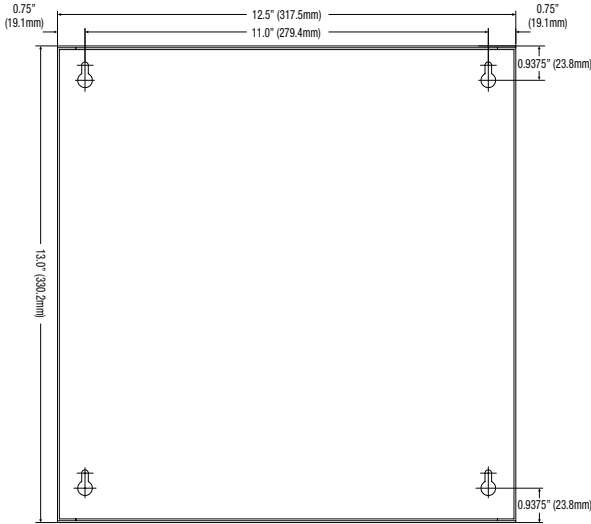
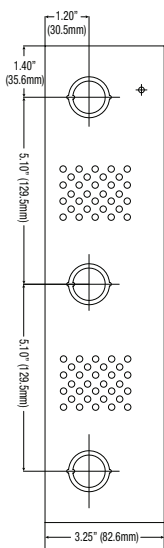
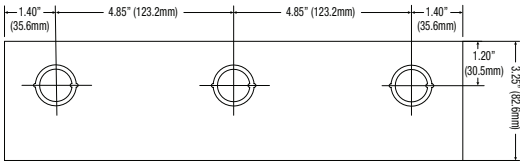
MOUNTING PLATE

**END VIEW**

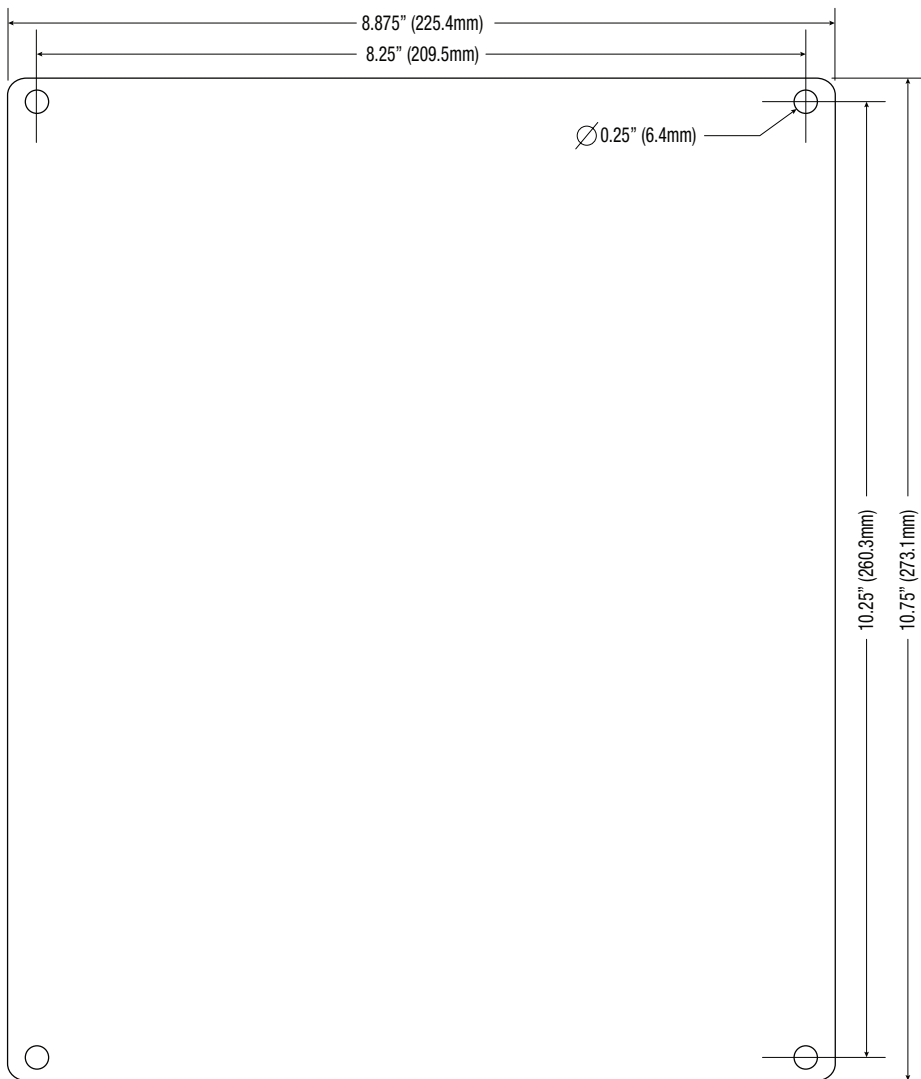


Ø 0.32" (8.1mm)  
 WALL MOUNTING HOLE X 4

**NetWay4E1BTX3**  
**Mechanical Drawing and Dimensions (H x W x D approx.):**  
13.5" x 13" x 3.25" (342.9mm x 330.2mm x 82.6mm)



**NetWay4E1BTPL3**  
**Mechanical Drawing and Dimensions (H x W x D approx.):**  
10.75" x 8.875" x 2.375" (273.1mm x 225.4mm x 60.3mm)



Altronix is not responsible for any typographical errors.

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website: [www.altronix.com](http://www.altronix.com) | e-mail: [info@altronix.com](mailto:info@altronix.com) | Lifetime Warranty  
III NetWay4E1BT3 Series L11X

