





Home » Altronix » Altronix NetWay5BT Series 5-Port Hardened 802.3bt 4PPoE Switches Instruction Manual



Contents

- 1 Altronix NetWay5BT Series 5-Port Hardened 802.3bt 4PPoE **Switches**
- **2 Product Information**
- **3 Product Usage Instructions**
- 4 Models Include
- **5 Overview**
- **6 Features**
- 7 Installation Instructions
- 8 Terminal and Port Identification
- 9 Technical Specifications
- 10 Typical Application
- 11 Wall Mount Installation
- 12 Mechanical Drawing and Dimensions
- 13 Documents / Resources
- 13.1 References
- **14 Related Posts**



Altronix NetWay5BT Series 5-Port Hardened 802.3bt 4PPoE Switches



Product Information

Specifications:

• Model: NetWay5BT Series

• Type: 5-Port Hardened 802.3bt 4PPoE Switches

• Power Supply: 48-56V UL Listed ITE power supply

• Ports: Four (4) IEEE802.3af/3at/3bt PoE ports rated at 90W each

• Total Power: 240W

Product Usage Instructions

Installation Instructions:

Wiring methods shall be by the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Wiring should be UL Listed and/or Recognized wire suitable for the application. All units should be installed by trained service personnel.

Installation:

For NetWay5BT/NetWay5BTPL:

- 1. Mount the board/backplane in the desired location/enclosure using the provided mounting hardware.
- 2. Connect NetWay5BT to a power source and Ethernet devices:
 - Power NetWay5BT with a 48-56V ITE power supply (e.g., Altronix PoE240 or PoE360 power supply/charger).
 - Connect a power source to the [GND +56V] terminals carefully observing polarity.
 - Connect a Data source to the [Data Input] RJ45 jack.
 - Connect Access Control boards, Altronix LINQ units, or other IP devices to the [Port 1 Port 4] RJ45
 jacks. Refer to the corresponding Installation Guides for details.

For NetWay5BTWPN/NetWay5BTWP/NetWay5BTWPX:

- 1. Remove the backplane from the enclosure before drilling. Do not discard hardware.
- 2. Mark and drill desired inlets on the enclosure to facilitate wiring.
- 3. Secure the enclosure with appropriate fasteners compatible with the mounting surface.
- 4. Mount the backplane in an enclosure with hardware.

FAQ:

- Q: What is the maximum power rating for each PoE port?
 - A: Each PoE port is rated at 90W.
- Q: Can I use non-UL-listed power supplies with NetWay5BT Series?

A: It is recommended to use a 48-56V UL-listed ITE power supply for safe operation.

NetWay5BT Series

5-Port Hardened 802.3bt 4PPoE Switches

Models Include

- NetWay5BTWP
 - 5-port Hardened 802.3bt 4PPoE Switch with
- Power Supply/Charger
 - NEMA4/4X, IP66-rated Outdoor enclosure.
- NetWay5BTWPX
 - 5-port Hardened 802.3bt 4PPoE Switch with
- Power Supply/Charger
 - NEMA4/4X, IP66-rated Outdoor enclosure.
 - Accommodates up to four (4) 12VDC/4AH batteries.
- NetWay5BTWPN
 - 5-port Hardened 802.3bt 4PPoE Switch
 - NEMA4/4X rated outdoor enclosure
- NetWay5BTX
 - 5-port Hardened 802.3bt 4PPoE Switch with
- Power Supply/Charger
 - NEMA1-rated Indoor enclosure.
- NetWay5BTPL
 - 5-port Hardened 802.3bt 4PPoE Switch with
- Power Supply/Charger
 - · Backplane version.
- NetWay5BT
 - 5-port Hardened 802.3bt 4PPoE Switch
 - Board Only

•	Installing Company:	Service Rep. Name:
•	Address:	Phone #:

Overview

Altronix NetWay5BT Series are hardened PoE+ switches. They provide a network data uplink and four (4) IEEE802.3af/3at/3bt PoE ports rated at 90W each, with 240W total power. They can power IP devices, such as PoE access controllers and cameras. Other applications may include integrating network door access systems with video surveillance.

For network managed switches see NetWay5BTQ Series.

Features

• Input:

- 115VAC, 60Hz, 1.8A or 230VAC, 50/60Hz, 1A.
- NetWay5BT/NetWay5BTWPN: 48-56V UL Listed ITE power supply.

• Output:

- Four (4) IEEE802.3af/3at/3bt PoE ports rated at 90W each.
- Single data uplink port.

• Ethernet Ports:

- Five (5) 10/100/1000 Mbps ports.
- · Connectivity: RJ45, auto-crossover.
- Wire type: 4-pair CAT5e or higher structured cable.
- Distance: up to 100m.
- Speed: 10/100/1000 Mbps, half/full duplex, auto negotiation.

LED Indicators:

- Individual PoE On LEDs for each port.
- Individual IP Link status, 100/1000Base-T/active LEDs for each port.

• Environmental:

- Operating Ambient Temperature: 30°C to 70°C (− 22°F to 158°F).
- Storage Temperature: 40°C to 85°C (– 40°F to 185°F).
- Humidity: 20 to 85%, non-condensing.
- Operating Altitude: 304.8 to 2,000m.

· Applications:

 Allows to power up to four (4) IP devices and network multiple remote devices without the need for running multiple cables from the main switch/server.

· Mechanical:

NetWay5BT:

• Dimensions (L x W x D approx.): 5.9" x 3.6" x 0.75" (150mm x 91.4mm x 19mm).

NetWay5BTWPN

- NEMA 4X, IP66-rated enclosure for outdoor use.
- Dimensions (H x W x D approx.): 9.5" x 7.32" x 4.92" (241.3mm x 185.9mm x 125mm).

NetWay5BTWP:

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).

NetWay5BTWPX:

- NEMA4/4X, IP66-rated enclosure for outdoor use.
- Accommodates four (4) 12VDC/4AH batteries (48V of backup).
- Dimensions (H x W x D approx.): 17.53" x 15.3" x 6.67" (445.3mm x 388.6mm x 169.4mm).

NetWay5BTPL:

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

NetWay5BTX:

• Dimensions (H x W x D approx.): 13.5" x 13" x 3.25" (342.9mm x 330.2mm x 83mm).

Installation Instructions

Wiring methods shall be by the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Wiring should be UL-listed and/or Recognized wire suitable for the application. All units should be installed by trained service personnel.

Installation:

NetWay5BT/NetWay5BTPL:

- 1. Mount board/backplane in the desired location/enclosure (mounting hardware included).
- 2. NetWay5BT: Connect NetWay5BT to power source and Ethernet devices: NetWay5BT can be powered by 48-56V ITE power supply, e. g. Altronix PoE240 or PoE360 power supply/charger.
- 3. Connect a power source to the [GND +56V] terminals carefully observing polarity (Fig. 1a, pg. 4).
- 4. Connect a Data source to the [Data Input] RJ45 jack (Fig. 1b, pg. 4).
- 5. Connect Access Control boards, Altronix LINQ units, or other IP devices to the [Port 1 Port 4] RJ45 jacks (Fig. 1c, pg. 4). Refer to the corresponding Installation Guides for details.

NetWay5BTWPN/NetWay5BTWP/NetWay5BTWPX:

1. Remove the backplane from the enclosure before drilling. Do not discard hardware.

Note: Make sure that hardware will not interfere with the 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 the 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 the enclosure before remounting circuit boards/backplanes.
- 4. Mounting NEMA4/4X rated enclosure (Enclosure Dimensions, pg. 8-10):

Wall mount: Mount the unit in the desired location. Mark and drill holes to line up with the top and bottom holes of the enclosure flange. Secure enclosure with appropriate fasteners (e. g. screws and anchors; bolts and locking nuts, etc.) that are compatible with the mounting surface and are of sufficient length/construction to ensure a secure mount (Fig. 3, pg. 7).

Pole Mount: Refer to Fig. 3 – 8, pg. 7.

5. Mount the backplane in an enclosure with hardware.

NetWay5BTX:

1. Mount the 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 the enclosure to earth ground.

Power Connection:

NetWay5BTWP, NetWay5BTWPX, NetWay5BTX, NetWay5BTPL:

- 1. Secure cabinet (backplane) to earth ground. Connect AC power from the overcurrent protective device circuit breaker (20A @ 115VAC, 60Hz, 16A @ 230VAC, 50/60Hz) to the terminals marked [L, N] on the power supply board. 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 (115VAC 60Hz Input,
 - Battery Wires). A 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.
- 2. When the use of stand-by batteries is desired, they can be LiFePO4 (lithium iron phosphate), lead acid, or gel type. If batteries are housed in a weather-proof enclosure (NetWay5BTWP, NetWay5BTWPX), they must be properly ventilated. Use Altronix Vent2 kit. Connect the battery to terminals marked [– BAT 24V +] on the power supply board.
 - Note: When batteries are not used, a loss of AC will result in the loss of output voltage.
 - **Note:** When using two 12V LiFePO4 (lithium iron phosphate) batteries, check with manufacturer specifications that batteries can be connected in series.
 - For outdoor battery backup, the battery enclosure must have sufficient ventilation.
 - Battery operational temperature should be rated 10-15°C lower than the manufacturer's rated high temperature.

NetWay5BT, NetWay5BTWPN:

- 1. Mount NetWay5BT/NetWay5BTWPN in the desired enclosure/location (mounting hardware is included).
- 2. NetWay5BT/NetWay5BTWPN can be powered by a 48-56V ITE power supply, e. g. Altronix PoE240 or PoE360 power supply/charger.

Input/Data Connections:

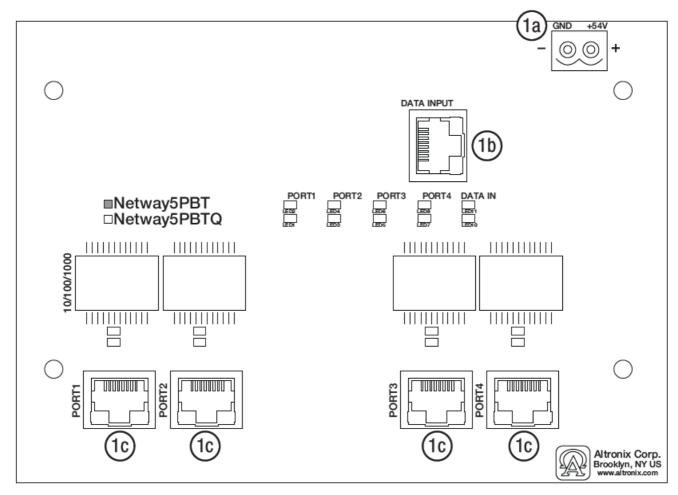
- 1. Connect a Data source to the [Data Input] RJ45 jack (Fig. 1b, pg. 4).
- 2. Connect Access Control boards, Altronix LINQ units, or other IP devices to the [Port 1 Port 4] RJ45 jacks (Fig. 1c, pg. 4). Refer to the corresponding Installation Guides for details.

Security:

Please ensure that the cover is secured with:

Key lock and screws for NetWay5BTX, Security Bolt for NetWay5BTWPN, NetWay5BTWP, NetWay5BTWPX.

Fig. 1 - NetWay5BT Board Configulration



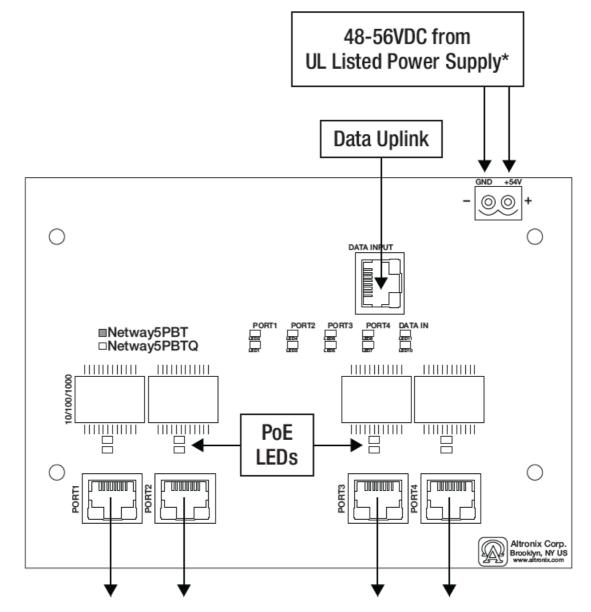
Terminal and Port Identification

Terminal/Port Legend	Function/Description	
GND +54V	Connect a 48-56V UL Listed power source to these terminals carefully observing polarity. F actory connected to power supply in NetWay5BTWP, NetWay5BTPL, NetWay5BTWPX, Net Way5BTX (Fig. 1a, pg. 4)	
Data Input	Can be used as a Data Uplink (Fig. 1b, pg. 4).	
Port 1 – Port 4	Data and PoE/PoE+ (IEEE802.3af/3at/3bt compliant) ports (Fig. 1c, pg. 4).	

Technical Specifications

Parameter	Description				
	NetWay5BTWP, NetWay5BTWPX, NetWay5BTX, NetWay5BTPL:				
Input Power Req uirements	115VAC, 60Hz, 1.8A or 230VAC, 50/60Hz, 1A.				
	NetWay5BT/NetWay5BTWPN: 48-56V from a UL Listed power source.				
Output	Four (4) PoE/PoE+ ports. Single data uplink port.				
	NetWay5BT: Individual PoE On LEDs for each port.				
Indicators	Individual IP Link status, 100/1000Base-T/active LEDs for each port.				
	Operating Ambient Temperature:				
	240W: - 30°C to 55°C (- 22°F to 131°F)				
	180W: - 30°C to 65°C (- 22°F to 149°F)				
Environmental C onditions	150W: - 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				
	Model	Product Weight	Shipping Weight		
	NetWay5BTWP NetWay5BT WPN NetWay5BTWPX Net Way5BTX NetWay5BTPL Ne tWay5BT	10.5 lb. (4.76 kg)	11.9 lb. (5.4 kg) 5 lb. (2.27 kg) 17.5 lb. (7.9kg) 7.55 lb. (3.42 kg) 2.6 lb. (1.18 kg) 0.75 lb. (0.34 kg)		
		3.7 lb. (1.68 kg)			
		15 lb. (6.8 kg)			
Weights (approx.		6.65 lb. (3.02 kg)			
		2.6 lb. (1.18 kg)			
		0.25 lb. (0.11 kg)			

Typical Application

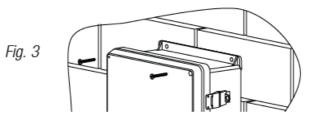


To Networked Access Controllers, Devices & Cameras and/or Altronix LINQ Series Ethernet connections

NetWay5BTWP, NetWay5BTWPX, NetWay5BTPL, and NetWay5BTX are factory connected to Power Supply.

Wall Mount Installation

1. Place the unit at the desired location and secure it with mounting screws (not included) (Fig. 3, pg. 7).



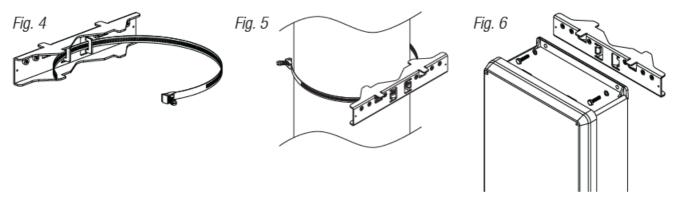
Pole Mounting Using Optional Pole Mount Kit

PMK1 (NetWay5BTWPN and NetWay5BTWP) or PMK2 (NetWay5BTWPX):

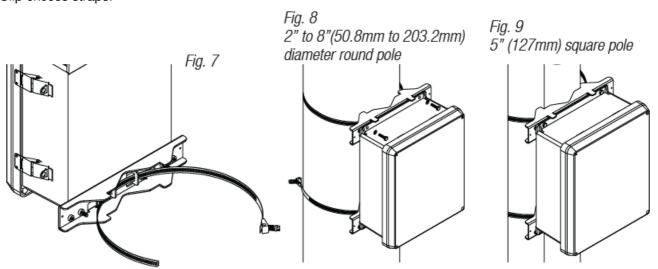
This installation should be made by qualified service personnel. This product contains no serviceable parts. Pole

mount kits are intended for use with Altronix outdoor rated power supplies or accessories housed in WP1, WP2, WP3 and WP4 enclosures. 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. 4, pg. 7).
- 2. Once the desired height of the top Pole Mount bracket is achieved, tighten the straps down by sliding open the end of the strap through the locking mechanism on the strap, then tighten the screw with a flat head screwdriver or 5/16" hex socket driver (Fig. 5, pg. 7 and Fig. 7, pg. 7).



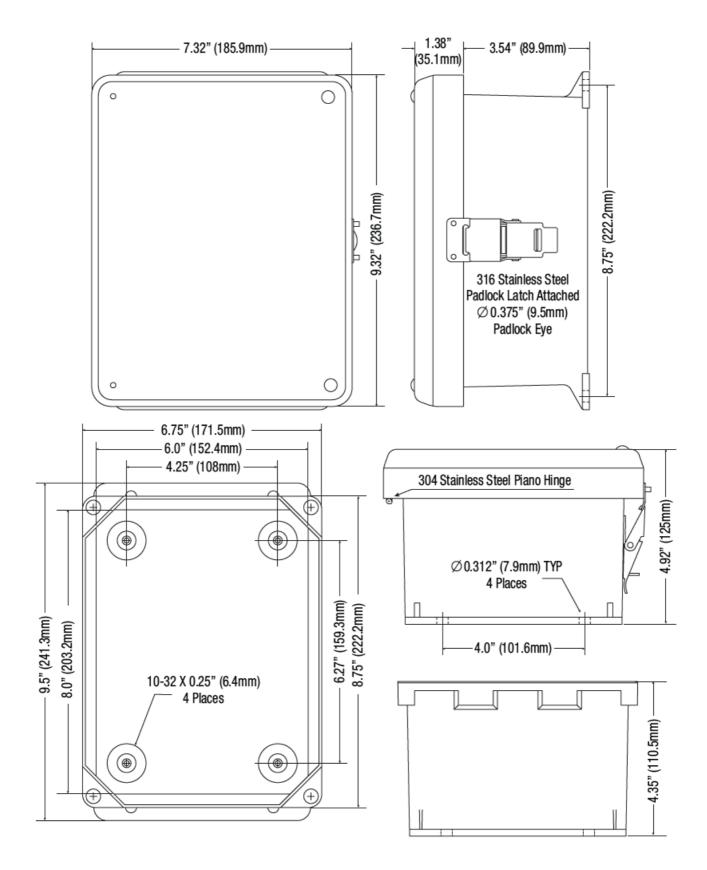
- 3. Attach the bottom bracket to the enclosure by inserting bolts through the flange of the enclosure and into the bracket, tightening bolts with a 7/16" hex socket (Fig. 5, pg. 7).
- 4. Thread the second wormgear quick-release strap through the slots on the back of the bottom mounting bracket (Fig. 7, pg. 7).
- 5. Mount the enclosure onto the top bracket by inserting bolts through the flange of the enclosure and into the bracket, tightening bolts with a 7/16" hex socket (Fig. 8, 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 the screw with a flat head screwdriver or 5/16" hex socket driver (Fig. 8, pg. 7).
- 7. Clip excess straps.



Mechanical Drawing and Dimensions

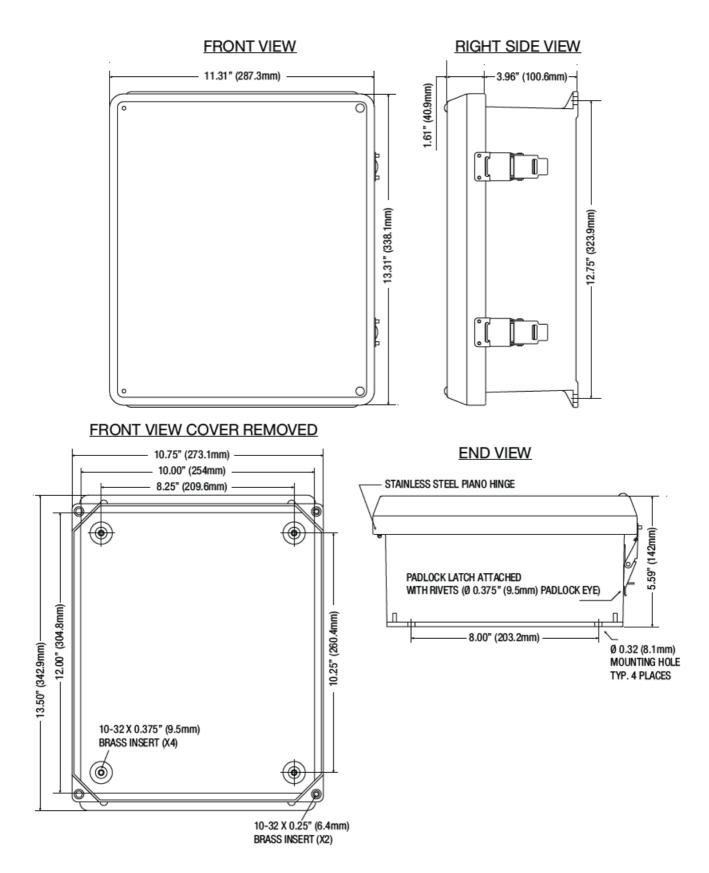
NetWay5BTWPN

Mechanical Drawing and Dimensions (H x W x D approx.): 9.5" x 7.32" x 4.92" (241.3mm x 185.9mm x 125mm)



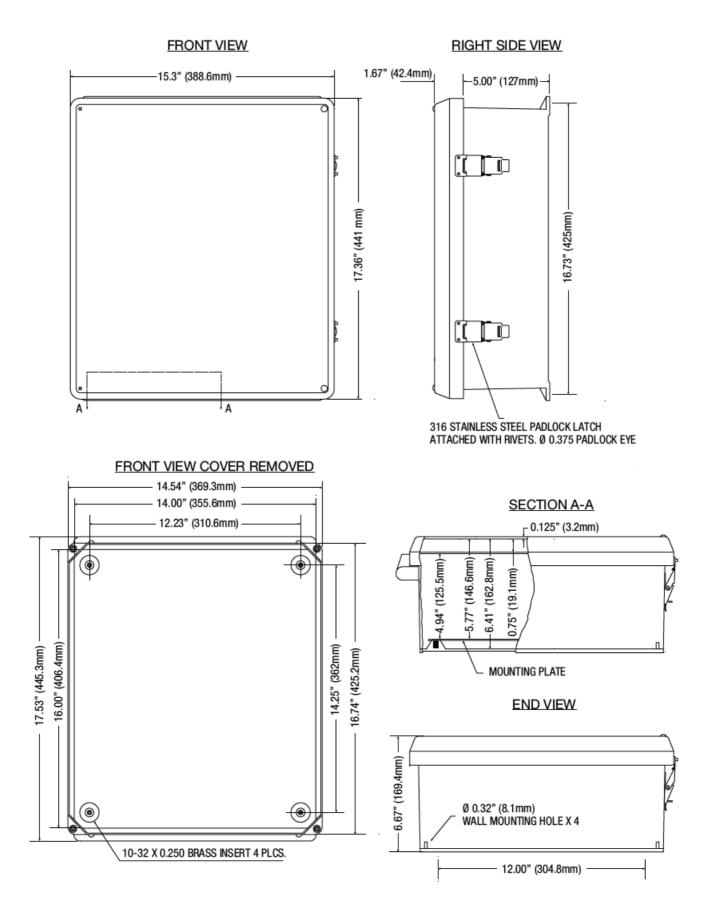
NetWay5BTWP

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)



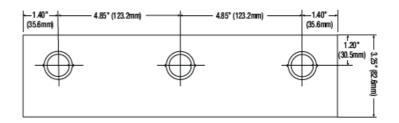
NetWay5BTWPX

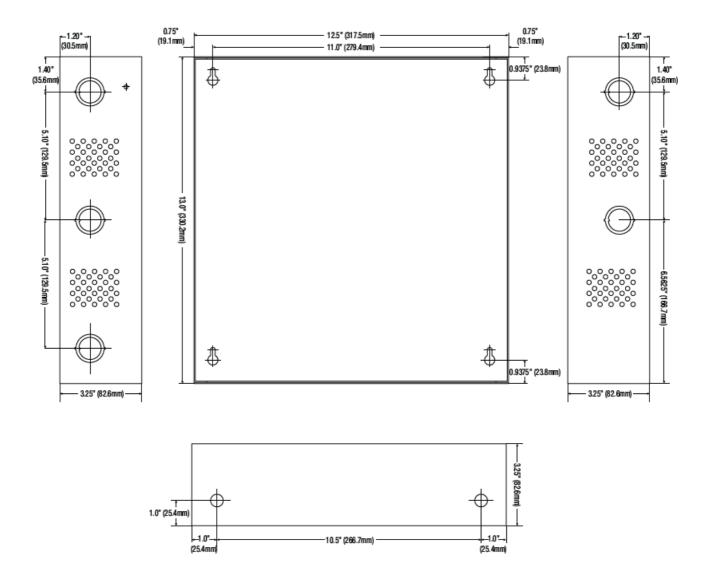
Mechanical Drawing and Dimensions (H x W x D approx.): $17.53" \times 15.3" \times 6.67"$ (445.3mm x 388.6mm x 169.4mm)



NetWay5BTX

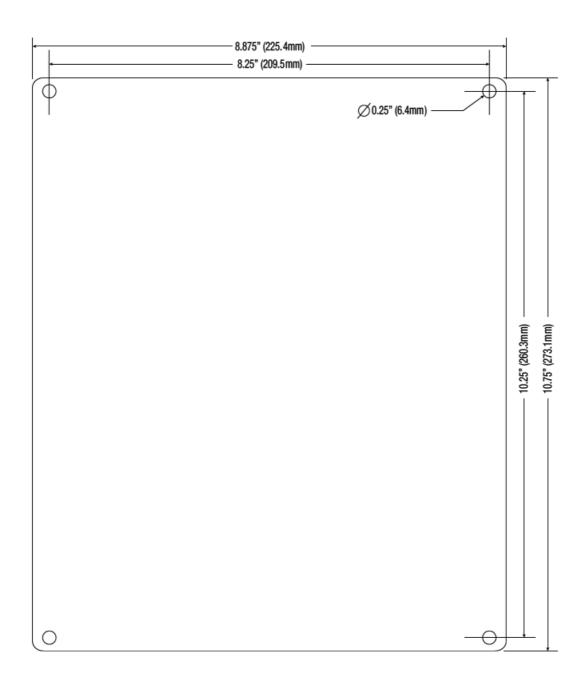
Mechanical Drawing and Dimensions (H x W x D approx.): 13.5" x 13" x 3.25" (342.9mm x 330.2mm x 82.6mm)





NetWay5BTPL

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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• Lifetime Warranty IINetWay5BT Seires C04X

Documents / Resources



Altronix NetWay5BT Series 5-Port Hardened 802.3bt 4PPoE Switches [pdf] Instruction Man

NetWay5BTWP, NetWay5BTX, NetWay5BTWPX, NetWay5BTPL, NetWay5BT, NetWay5BTWP N, NetWay5BT Series 5-Port Hardened 802.3bt 4PPoE Switches, NetWay5BT Series, 5-Port H ardened 802.3bt 4PPoE Switches, Hardened 802.3bt 4PPoE Switches, 802.3bt 4PPoE Switches, Switches, Switches

References

• User Manual

Manuals+, Privacy Policy

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