



Power over the Ethernet

NetWay5P Series

5-Port Hardened PoE+ Switches

Models Include:

NetWay5PWP

- 5-port Hardened PoE Switch with Power Supply/Charger
- NEMA4/4X, IP66 rated outdoor enclosure.

NetWay5PWPX

- 5-port Hardened PoE Switch with Power Supply/Charger
- NEMA4/4X, IP66 rated outdoor enclosure.
- Accommodates up to four (4) 12VDC/4AH batteries.

NetWay5PX

- 5-port Hardened PoE Switch with Power Supply/Charger
- NEMA1 rated indoor enclosure.

NetWay5PWPN

- 5-port Hardened PoE Switch
- NEMA4/4X rated outdoor enclosure

NetWay5P

- 5-port Hardened PoE Switch
- Board Only

Installation Guide



More than just power.™

Rev. 011824

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Altronix NetWay5P Series are hardened PoE+ switches. They provide a network data uplink and four (4) PoE ports to power IP devices, such as PoE access controllers and cameras. Other applications may include solar power (with NetWay5P and NetWay5PWPN), as well as integrating network door access systems with video surveillance.

For network managed switches see NetWay5PQ Series.

Features:

Input:

- **NetWay5PWP, NetWay5PWPX, NetWay5PX:** 120VAC, 60Hz, 2.5A.
- **NetWay5P/NetWay5PWPN:** 12 or 24VDC from a UL Listed power source or a solar panel with nominal 24V (~12-35V) output.
- Board internal power consumption is 6W (0.25A@24V or 0.5A@12V).

Output:

- Four (4) PoE/PoE+ ports.
- IEEE 802.3at (30W) and IEEE 802.3af (15W) compliant.
- Maximum Output Power: 120W at 24VDC/6A or 60W at 12VDC/6A.
- 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.

Applications:

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

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.

Mechanical:

NetWay5P:

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

NetWay5PWPN

- 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).

NetWay5PWP:

- 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).

NetWay5PWPX:

- NEMA4/4X, IP66 Rated enclosure for outdoor use.
- Accommodates four (4) 12VDC/4AH batteries (24V 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).

NetWay5PX:

- 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 in accordance with 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 a trained service personnel.

Installation:

NetWay5P:

1. Mount NetWay5P in the desired location/enclosure (mounting hardware included).
2. Connect NetWay5P to power source and Ethernet devices:
NetWay5P can be powered by a UL Listed 12 or 24VDC power source, e.g. Altronix eFlow power supply/charger or a solar panel with nominal 24V (~12-35V) output.
3. Connect a power source to the [GND +24V] 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.

NetWay5PWP/NetWay5PWP/NetWay5PWPX:

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. 8-11*):

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. 4, pg. 7*).

Pole Mount: Refer to *Fig. 5 - 10, pg. 7*.

5. Mount backplane in enclosure with hardware.

NetWay5PX:

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:

NetWay5PWP, NetWay5PWPX, NetWay5PX:

1. Connect unswitched AC power (120VAC 60Hz) to terminals marked [L, N] (*Fig. 2a, pg. 4*). Green "AC" LED on power supply board will turn on. Use 14 AWG or larger for all power connections.
Secure green wire lead to earth ground.
Keep power-limited wiring separate from non power-limited wiring (120VAC 60Hz Input, Battery Wires). 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 must be lead acid or gel type. If batteries are housed in a weather-proof enclosure (NetWay5PWP, NetWay5PWPX), it must be properly ventilated. Use Altronix Vent2 kit. Connect battery to terminals marked [- BAT +] (*Fig. 2g, pg. 4*). Use two (2) 12VDC batteries connected in series for 24VDC operation (battery leads included) Use batteries - Casil CL1270 (12V/7AH), CL12120 (12V/12AH), CL12400 (12V/40AH), CL12650 (12V/65AH) batteries or UL recognized BAZR2 batteries of an appropriate rating. When batteries are not used, a loss of AC will result in the loss of the output voltage.
3. Connect appropriate signaling notification devices to AC FAIL & BAT FAIL (*Fig. 2b, pg. 4*) supervisory relay outputs.
4. To delay AC reporting for 2 hrs. set DIP switch [AC Delay] to OFF position (*Fig. 2c, pg. 4*).
To delay AC reporting for 1 min. set DIP switch [AC Delay] to ON position (*Fig. 2c, pg. 4*).
Note: Must be set to ON position for Burglar Alarm Applications.
5. To enable Fire Alarm Disconnect set DIP switch [Shutdown] to ON position (*Fig. 2c, pg. 4*).
To disable Fire Alarm Disconnect set DIP switch [Shutdown] to OFF position (*Fig. 2c, pg. 4*).
6. Trigger terminals are end of a line resistor supervised (10k ohms). Opening or shorting trigger terminals will cause [DC] output to shutdown (*Fig. 2d, pg. 4*).
7. Place a jumper for non-latching FACP. A momentary short on these terminals resets FACP latching [Trigger EOL Shutdown] (*Fig. 2e, pg. 4*).

NetWay5P, NetWay5PWP:

1. Mount NetWay5P/NetWay5PWP in the desired enclosure/location (mounting hardware is included).
2. NetWay5P/NetWay5PWP can be powered by a UL Listed 12/24VDC power source, e.g. Altronix eFlow power supply/chargers or a solar panel with nominal 24V (~12-35V) output.

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.

Fig. 1 - Netway5P Board Configuration

1a - GND +24V

DATA INPUT 1b

PORT1 PORT2 PORT3 PORT4 DATA IN 1000 100

10/100/1000

1c 1c 1c 1c

Netway5P
Netway5PQ

Altronix Corp.
Brooklyn, NY US
www.altronix.com

The diagram shows the rear panel of the device with the following components:

- 2a:** A 3-pin AC power input connector with terminals labeled L, G, and N.
- 2b:** A 6-pin status indicator connector with terminals labeled NC, C, NO, NC, C, NO. Below the terminals are labels: AC FAIL, BATT FAIL, and BATT FAIL.
- 2c:** A 2-pin connector with terminals labeled AC and DC.
- 2d:** A 4-pin connector with terminals labeled 1 min, enable, 2 hr, and disable.
- 2e:** A 4-pin connector with terminals labeled TRIGGER, EOL, NO, and GND.
- 2f:** A 4-pin connector with terminals labeled SUPERVISED, RESET, + AUX, and -.
- 2g:** A 2-pin battery input connector with terminals labeled + and - BAT.
- 2h:** A 2-pin DC output connector with terminals labeled + and - DC.

Terminal and Port Identification:

NetWay5P PoE+ Switch

Terminal/Port Legend	Function/Description
GND +24V	Connect a 12/24VDC UL Listed power source to these terminals carefully observing polarity. Factory connected to power supply in NetWay5PWP, NetWay5PWPX, NetWay5PX (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+ (IEEE 802.3af (15W) and IEEE 802.3at (30W) compliant) ports (Fig. 1c, pg. 4).

eFlow104NB Power Supply/Charger

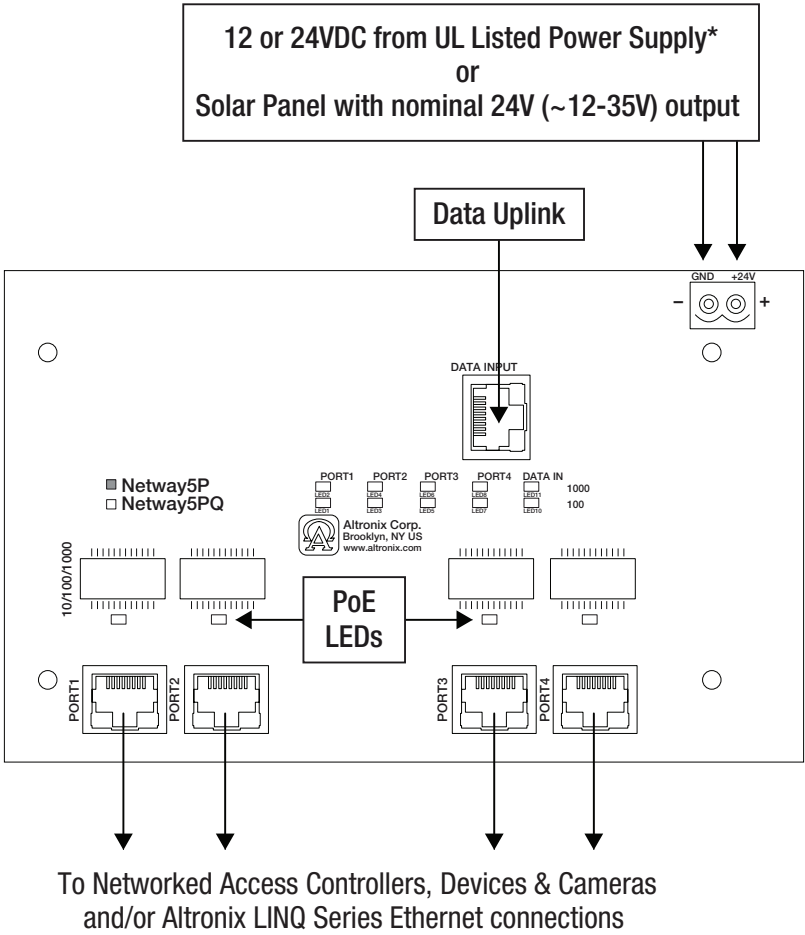
Terminal Legend	Function/Description
L, N	Connect 120VAC 60Hz to these terminals: L to hot, N to neutral (non power-limited) (Fig. 2a, pg. 4).
– DC +	24VDC nominal @ 10A continuous output factory connected to NetWay5P (Fig. 2h, pg. 4).
Trigger EOL Supervised	Fire Alarm Interface trigger input from a short or FACP. Trigger inputs can be normally open, normally closed from an FACP output circuit (power-limited input) (Fig. 2d, pg. 4).
NO, GND RESET	FACP interface latching or non-latching (power-limited) (Fig. 2e, pg. 4).
+ AUX –	Auxiliary Class 2 power-limited output rated @ 1A (unswitched) (Fig. 2f, pg. 4).
AC Fail NC, C, NO	Indicates loss of AC power, e.g. connect to audible device or alarm panel. Relay normally energized when AC power is present. Contact rating 1A @ 30VDC (power-limited) (Fig. 2b, pg. 4).
Bat Fail NC, C, NO	Indicates low battery condition, e.g. connect to alarm panel. Relay normally energized when DC power is present. Contact rating 1A @ 30VDC. A removed battery is reported within 5 minutes. Battery reconnection is reported within 1 minute (power-limited) (Fig. 2b, pg. 4).
– BAT +	Stand-by battery connections. Maximum charge current 1.54A (non power-limited) (Fig. 2g, pg. 4).

Technical Specifications:

Parameter	Description		
Input Power Requirements	NetWay5PWP, NetWay5PWPX, NetWay5PX: 120VAC, 60Hz, 2.5A. NetWay5P/NetWay5PWPN: 12/24VDC from a UL Listed power source or a solar panel with nominal 24V (~12-35V) output. Current draw: 6A at maximum 120W output.		
Output	Four (4) PoE/PoE+ ports. Single data uplink port.		
Indicators	NetWay5P: Individual PoE On LEDs for each port. Individual IP Link status, 100/1000Base-T/active LEDs for each port. eFlow104NB: AC input and DC output LED indicators.		
Environmental Conditions	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.		
Weights (approx.)	Model	Product Weight	Shipping Weight
	NetWay5PWP	10.5 lb. (4.76 kg)	11.9 lb. (5.4 kg)
	NetWay5PWPN	3.7 lb. (1.68 kg)	5 lb. (2.27 kg)
	NetWay5PWPX	15 lb. (6.8 kg)	17.5 lb. (7.9kg)
	NetWay5PX	6.65 lb. (3.02 kg)	7.55 lb. (3.42kg)
	NetWay5P	0.25 lb. (0.11 kg)	0.75 lb. (0.34 kg)

Fig. 3

Typical Application:

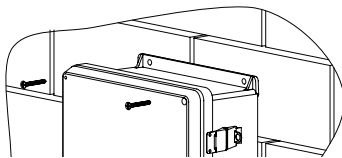


***NetWay5PWP, NetWay5PWPX and NetWay5PX are
factory connected to Power Supply**

Wall Mount Installation

1. Place unit at desired location and secure with mounting screws *(not included)* (Fig. 4, pg. 7).

Fig. 4



Pole Mounting Using Optional Pole Mount Kit PMK1 (NetWay5PWP and NetWay5PWP) or PMK2 (NetWay5PWPX):

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 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. 5, 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. 6, pg. 7 and Fig. 8, pg. 7).

Fig. 5

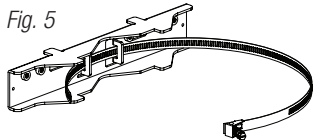


Fig. 6

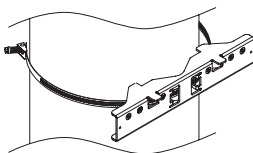
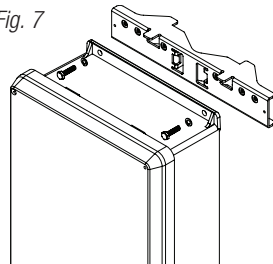


Fig. 7



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. 8, pg. 7).
4. Thread the second wormgear quick release strap through the slots on the back of the bottom mounting bracket (Fig. 8, 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. 9, 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. 9, pg. 7).
7. Clip excess straps.

Fig. 8

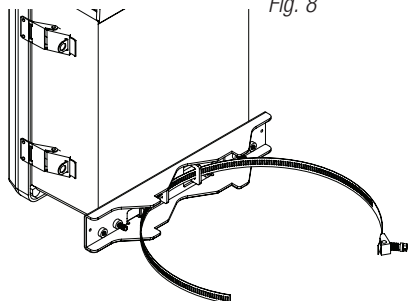


Fig. 9
2" to 8" (50.8mm to 203.2mm)
diameter round pole

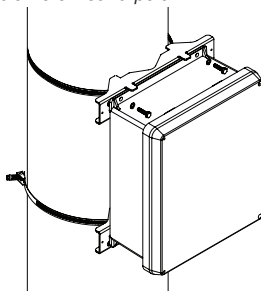
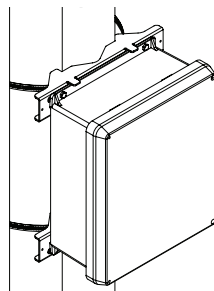
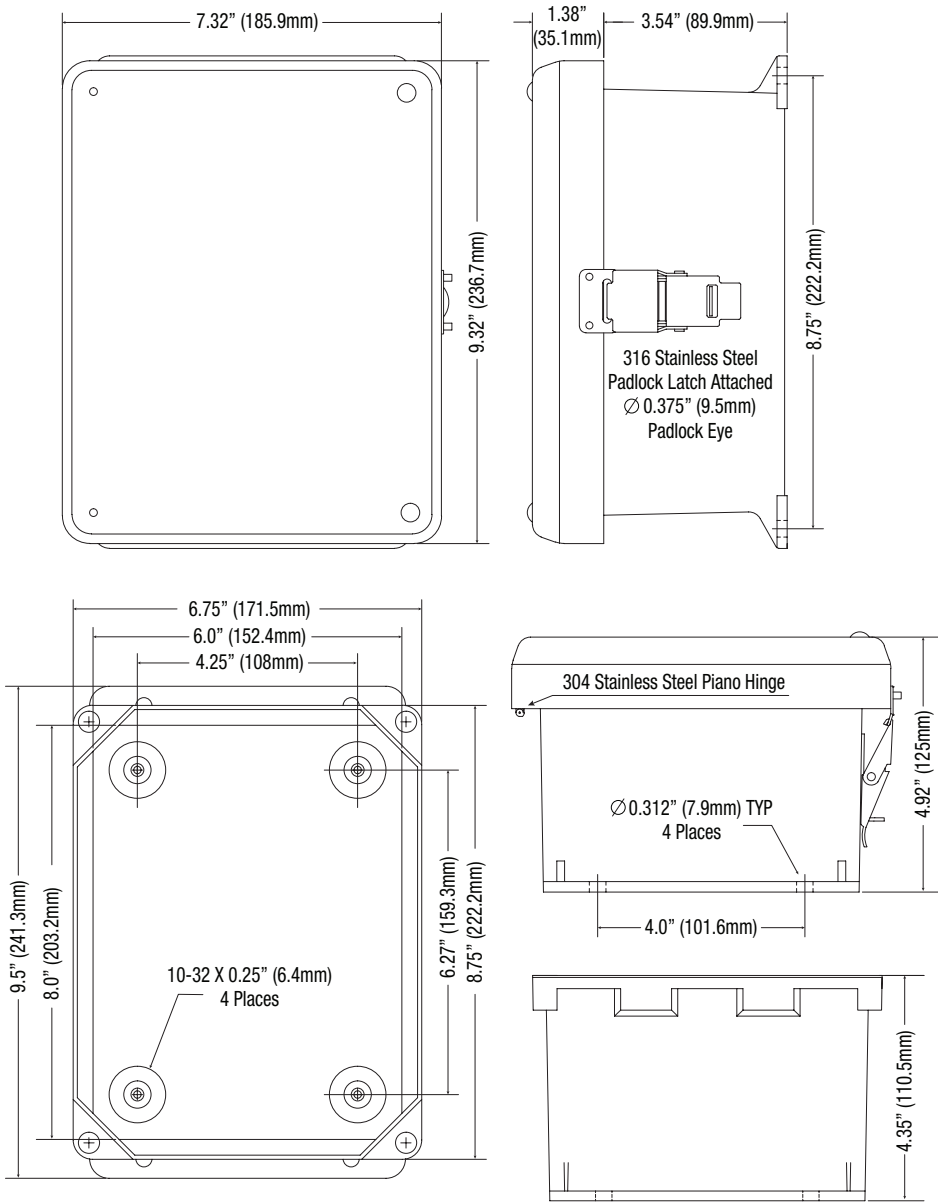


Fig. 10
5" (127mm) square pole



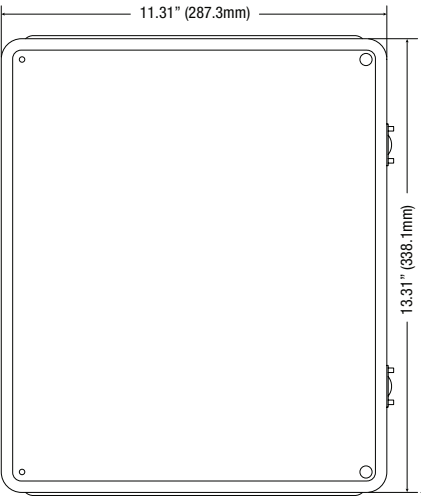
NetWay5PWP
Mechanical Drawing and Dimensions (H x W x D approx.):

9.5" x 7.32" x 4.92" (241.3mm x 185.9mm x 125mm)

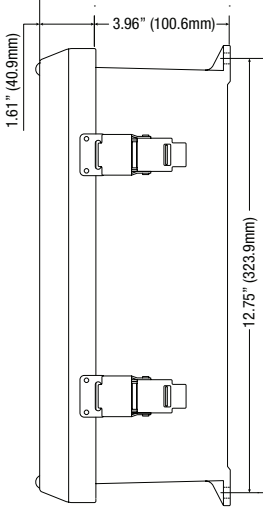


NetWay5PWP
Mechanical Drawing and Dimensions (H x W x D approx.):
13.31" x 11.31" x 5.59" (338.1mm x 287.3mm x 142mm)

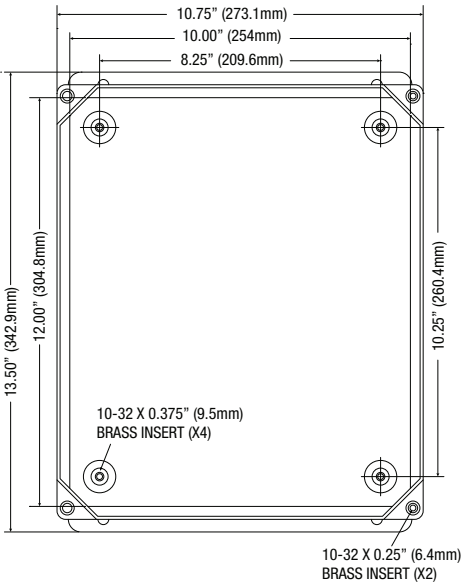
FRONT VIEW



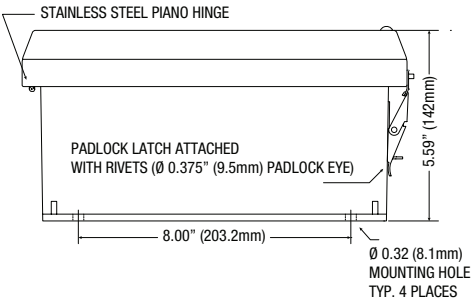
RIGHT SIDE VIEW



FRONT VIEW COVER REMOVED

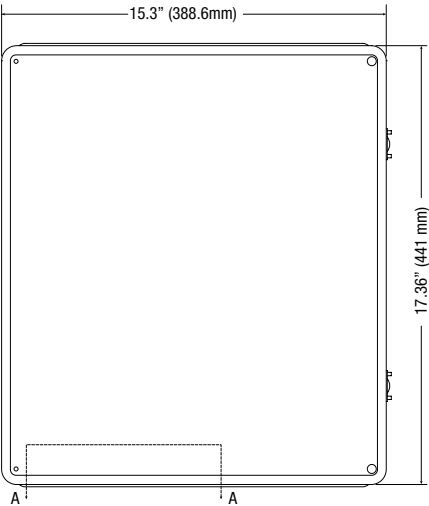


END VIEW

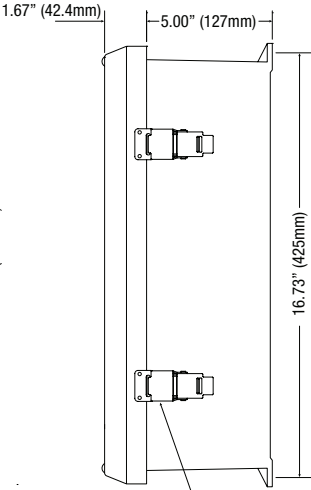


NetWay5PWPX
Mechanical Drawing and Dimensions (H x W x D approx.):
17.53" x 15.3" x 6.67" (445.3mm x 388.6mm x 169.4mm)

FRONT VIEW

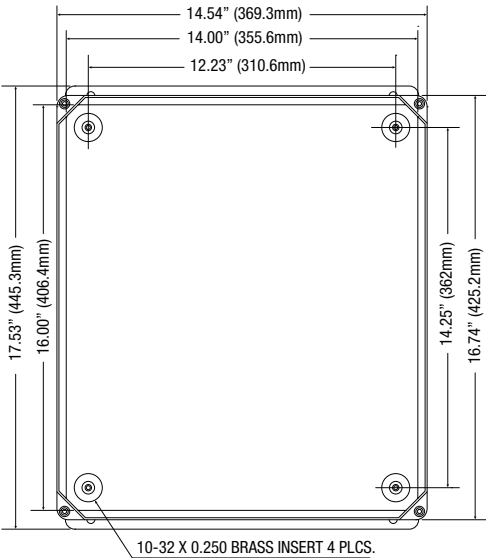


RIGHT SIDE VIEW

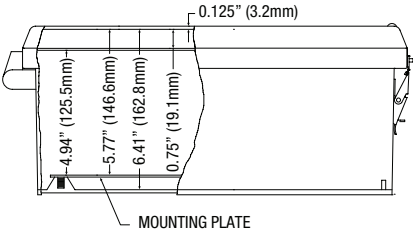


316 STAINLESS STEEL PADLOCK LATCH
ATTACHED WITH RIVETS. Ø 0.375 PADLOCK EYE

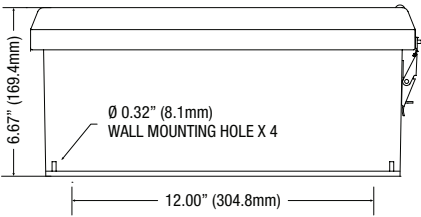
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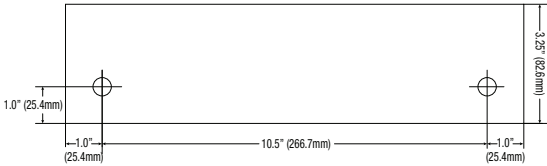
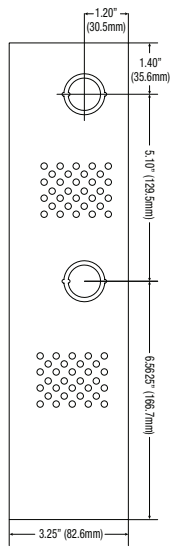
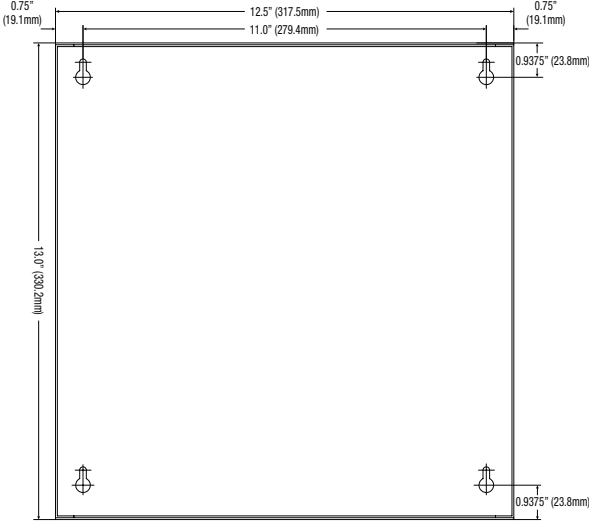
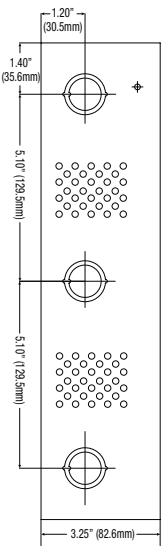
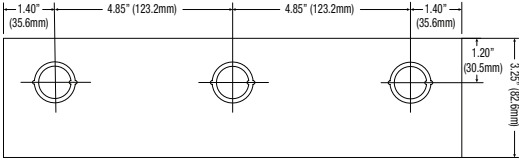
SECTION A-A



END VIEW



NetWay5PX
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)



Notes:

Altronix is not responsible for any typographical errors.

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NetWay5P Series Rev. 111423 E09X

