



NetWay5ES

5-Port Unmanaged PoE+ Switch



NetWay5ESQ

5-Port Managed PoE+ Switch

Installation Guide

Overview:

Altronix NetWay5ES and NetWay5ESQ allow for system expansion by accommodating up to four (4) IP camera/devices over a single CAT-5e or higher structured cable. Power up to 90W can be provided by Altronix NetWay1BT 802.3bt PoE injector, or any IEEE 802.3bt standard midspan/endspan typically located at the MDF (Main Distribution Frame). NetWay5ESQ features embedded LINQ™ Technology to remotely monitor, control, and report power/diagnostics from anywhere over the network. NetWay5ES is an unmanaged PoE switch version.

Features:

Agency Listings:

- CE European Conformity.

Input:

- 802.3bt PoE (90W).

Power Output:

- Maximum power per port: PoE+ (30W).
- Total maximum power: 90W.

Ethernet:

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

LED Indicators:

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

Environmental:

- **Operating Ambient Temperature (90W):**
 - 40°C to 75°C (– 40°F to 167°F)
- **Storage Temperature:**
 - 40°C to 75°C (– 40°F to 167°F)

Applications:

- Remote installation and powering of a 4-port PoE+ switch.
Star expansion of remote node to 4-PoE+ cameras/devices.

Mechanical:

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

NetWay5ESQ Only:

LINQ Technology:

- Remote network management allows for camera/device reset and diagnostic monitoring.
- Provides local and/or remote access to critical information via LAN/WAN.
- Email and Windows Dashboard Alert notifications report real-time events.
- Event log tracks history.

VLAN:

- Multiple management VLAN assignment.
- 802.1Q Tagged VLAN.
- Up to 10 VLAN groups. ID Range 2-4095.

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. Midspan or endspan and NetWay5ES(Q) are not intended to be connected to outside plant leads and should be installed indoors within the protected premises. The midspan or endspan injector and NetWay5ES(Q) are intended for indoor use only.

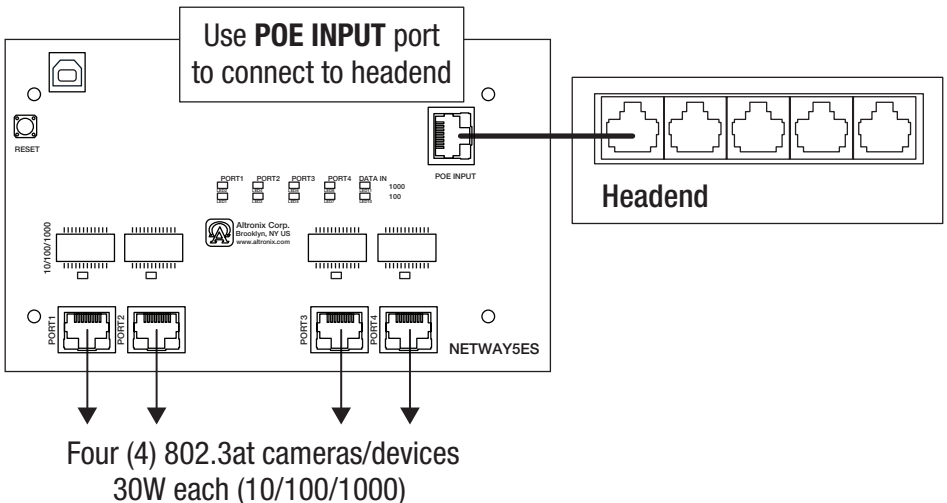
1. **Midspan or Endspan** installation: Please refer to the corresponding installation instructions.
2. **NetWay5ES(Q)** installation:
 - a. Mount NetWay5ES(Q) in the desired location/enclosure (mounting hardware included).
 - b. Connect structured cable from a midspan or other power source to RJ45 jack marked [POE INPUT] to midspan or endspan (*Fig. 1, pg. 5*).
 - c. Connect Access Control boards, Altronix LINQ units or other IP devices to the [Port 1 - Port 4] RJ45 jacks (*Fig. 1a, pg. 4*). Refer to the corresponding Installation Guides for details.

Technical Specifications:

Parameter	Description
Input Power Requirements	802.3bt PoE (90W)
Output	Maximum power per port: PoE+ (30W) Total maximum power 90W, dependent on power from midspan or endspan.
Indicators	Individual IP Link status, 100/1000 active LEDs for each port.
Environmental Conditions	Operating Ambient Temperature (90W): – 40°C to 75°C (– 40°F to 167°F) Storage Temperature: – 40°C to 75°C (– 40°F to 167°F) Relative Humidity: 85%, +/- 5% Operating Altitude: – 304.8 to 609.6m.
Regulatory Compliance	CE European Conformity
Weights (approx.)	Product: 0.25 lb. (0.11 kg) Shipping: 0.75 lb. (0.34 kg).

Typical Application:

Fig. 1 - NetWay5ES(Q) Powered by PoE from Headend Equipment.



NetWay5ESQ Only: Configuring Unit for Network Connection:

Visit altronix.com for the latest firmware and installation instructions

Factory Reset Option:

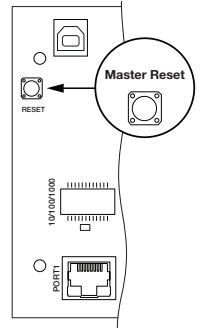
1. Power the unit down. Allow approximately 30 seconds for the unit to power down completely.
2. Depress **Master Reset** button on NetWay5ESQ while reapplying power to the unit (Fig. 3a, pg. 8, Fig. 4 pg. 9). Continue holding the button until the LEDs on board go through the start up cycle, then release the button.
3. The unit returns to the original factory settings.

VLans

VLans (Virtual Local Area Networks) are a subnetwork that allow for the grouping together of devices for improved network traffic as well as providing higher security by allowing greater control over which devices have access to each other.

It is important to plan how you will setup your devices for each vLan.

Fig. 2



Configuring vLan on the Altronix NetWay5ESQ Switch:

1. Ensure that Laptop or PC being used to program the vLan settings is on a port that will be assigned to your first vLan configuration. By default the management portion of the software is assigned to vLan-1, **CAUTION:** Changing VID=1, the industry standard VLAN HOST address to any other VID address should be done with caution and performed only locally, since the change will drop the original HOST connection. Local access then facilitates a physical reconnection to respective port.

Note: Only this vLan network allows access to IP management.

2. In Network Section click on vLan Tab.
3. Click Add vLan.
4. Enter a name for the vLan.
5. Enter a vLan ID, i.e. 10, 20, etc. Ensure this vLan ID is associated with a vLan setup on the main switch and that your Laptop or PC being used for programming is on this same ID.

Note: vLan ID could be any value 2-4094.

6. Assign vLan QOS (Quality of Service) priority. 0 = Lowest and 7 = Highest
7. Pick a Trunk port (Tagged Ports). Trunk ports are typically the main connection for network traffic for each group. They are usually connected to a network switch, WAPs, etc.
8. Pick the Access port(s) (Untagged Ports) associated with the vLan. Access Ports are typically used for Cameras, etc. If programming locally, ensure your laptop or PC is connected to one of these ports.
9. Save Configuration.
10. Repeat steps 2 - 9 to add another vLan.

If unit is accidentally programmed incorrectly and you cannot get into the NetWay5ESQ programming, physically moving ports of your PC connected to the main switch to a correct port (when being programmed remotely), or, as a last resort, completing a factory reset locally and reprogramming the unit.

11. Advanced Port Settings:

Unknown VID Packet Forwarding Configuration:

On ingress unknown VID, Forward to a fixed set of ports. By default no forwarding is set.

Configuration on Ingress Untagged Traffic:

Trunk Port action for ingress UNTAGGED packets. By default do not drop packets.

Keep Tag on Egress:

Select if you want ACCESS Port to keep the vLan tag when sending egress packets.

By default tags are stripped.

Preferred VLAN Forwarding:

For ACCESS Ports that belong to more than one vLan. Select preferred vLan to forward UNTAGGED ingress packets. By default preferred vLan is the last vLan created.

Notes:

Altronix is not responsible for any typographical errors.

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