Overview
This guide pertains to the NXA-ENET8-POE+ Gigabit PoE Ethernet Switch (FG2178-64). The purpose of this document is to illustrate how the device is to be installed and set up in its simplest configuration by a trained technician.

Additional Documentation
Additional documentation for this device is available at www.amx.com. Refer to the NXA-ENET8-POE+ Instruction Manual for additional details on installing, upgrading, and wiring the NXA-ENET8-POE+.

What's in the Box?
The following items are included with the NXA-ENET8-POE+:

- NXA-ENET8-POE+ Gigabit PoE Ethernet Switch
- AC Power Cord
- Rack Mounting Kit containing two standard brackets and eight screws for attaching the brackets to the switch.
- 4 adhesive foot pads for surface mounting
- Quick Start Guide
- Safety Instructions

Chassis Specifications
Size (WxDxH): 12.99 x 8.03 x 1.67 in. (33.0 x 20.4 x 4.26 cm)
Weight: 5.34lb (2.4kg)

WARNING: On the NXA-ENET8-POE+, the bottom of the enclosure is a hot surface. Do not touch!

Environmental Requirements
The environmental requirements for the NXA-ENET8-POE+ are as follows:

- Operating Temperature: 32° F (0° C) to 104° F (40° C)
- Storage Temperature: -40° F (-40° C) to 158° F (70° C)
- Storage Humidity: 0% to 90% RH (non-condensing)

Rack Mounting the Switch
The switch is designed to be installed in a standard 19-inch rack or on a desktop or shelf. Following your rack plan, mark the holes in the rack where the switch will be installed. Lift the switch into the rack and hold it in a position aligned with the marked holes. Secure the switch in the rack, using four rack-mounting screws (not provided).

CAUTION: For safe operation, install the switch with the RJ-45 ports facing up.

Connecting Power
Connect the switch to an AC power source to power on. Verify that the external AC power requirements for the switch can be met as listed in the Power section above.

CAUTION: Before connecting the switch to AC power, the grounding terminal screw on the switch rear panel must be connected to earth.

Connecting Network Cables
Install SFP transceivers and connect network cables to port interfaces:

- For RJ-45 ports, use 100-ohm Category 5, 5e or better twisted-pair cable for 1000BASE-T connections, Category 5 or better for 100BASE-TX connections, and Category 3 or better for 10BASE-T connections.
- First install SFP transceivers and then connect fiber optic cabling to the transceiver ports. As connections are made, check the port status LEDs to be sure the links are valid.

Verifying Switch Operation
Verify basic switch operation by checking the system LEDs.

When operating normally, the Diag and Power LEDs should both be green.

Power
Active power requirements:

- AC Input Power: 100-240V, 50-60Hz, 2.1A
- Total Power consumption: 160W

NOTE: Maximum power consumption values are measured under a 100 percent loading test and should be used as estimates for planning purposes.

Grounding the Switch

CAUTION: The device must be installed in a restricted-access location, and the protective earthing terminal on the chassis must be permanently connected to earth ground to ground the chassis and protect the operator from electrical hazards.

Before powering on the switch, ground the chassis and protect the operator from electrical hazards.

Ensure the rack on which the switch is to be mounted is properly grounded and in compliance with ETSI ETS 300 253. Verify that there is a good electrical connection to the grounding point on the rack (no paint or isolating surface treatment).

CAUTION: The earth connection must not be removed unless all supply connections have been disconnected.

Environmental Requirements
The serial port's configuration requirements are as follows: 115200 bps, 8 characters, no parity, one stop bit, 8 data bits, and no flow control. You can log in to the serial port using the default settings:

- Login Name: admin
- Password: admin

Connecting Power Cables
Install SFP transceivers and connect network cables to port interfaces:

- For RJ-45 ports, use 100-ohm Category 5, 5e or better twisted-pair cable for 1000BASE-T connections, Category 5 or better for 100BASE-TX connections, and Category 3 or better for 10BASE-T connections.
- First install SFP transceivers and then connect fiber optic cabling to the transceiver ports. As connections are made, check the port status LEDs to be sure the links are valid.

Verifying Switch Operation
Verify basic switch operation by checking the system LEDs.

When operating normally, the Diag and Power LEDs should both be green.

Power
Active power requirements:

- AC Input Power: 100-240V, 50-60Hz, 2.1A
- Total Power consumption: 160W

NOTE: Maximum power consumption values are measured under a 100 percent loading test and should be used as estimates for planning purposes.

Grounding the Switch

CAUTION: The device must be installed in a restricted-access location, and the protective earthing terminal on the chassis must be permanently connected to earth ground to ground the chassis and protect the operator from electrical hazards.

Before powering on the switch, ground the chassis and protect the operator from electrical hazards.

Ensure the rack on which the switch is to be mounted is properly grounded and in compliance with ETSI ETS 300 253. Verify that there is a good electrical connection to the grounding point on the rack (no paint or isolating surface treatment).

CAUTION: The earth connection must not be removed unless all supply connections have been disconnected.