

## 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](http://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.

## 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 switch to earth.

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.



connect grounding wire

**FIG. 1** CONNECT A GROUNDING WIRE AND LUG TO THE GROUNDING POINT ON THE SWITCH REAR PANEL, AND THEN TO THE RACK GROUND

## 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.



**FIG. 2** PLUG THE AC POWER CORD INTO THE SOCKET ON THE REAR OF THE SWITCH

## Verifying Switch Operation

Verify basic switch operation by checking the system LEDs.

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



**FIG. 3** SYSTEM STATUS LEDs

## Making Initial Configuration Changes

At this point, you may need to make a few basic switch configuration changes before connecting to the network. You can either connect to the switch console port or any RJ-45 port to perform this task.

### Through an RJ-45 Port

The switch offers a user-friendly web-based management interface for the configuration of all the unit's features.

You can make initial configuration changes by connecting a PC directly to one of the switch's RJ-45 ports. The switch has a default management IP address of 192.168.2.10 and a subnet mask of 255.255.255.0. You must set your PC IP address to be on the same subnet as the switch (that is, the PC and switch addresses must both start 192.168.2.x).

Log in to the web interface using the default settings:

- Login Name: admin
- Password: admin

### Through the Console Port

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 command-line interface (CLI) using default settings:

- User: admin
- Password: admin

## 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 100BASE-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.

