NX Energy Module

Installation Guide

3905D_NX_Energy_Module_Install-Guide

Current

3905D 100621

Table of Contents

Precautions

Read and understand all instructions before beginning installation.

NOTICE: For installation by a licensed electrician in accordance with National and/or local Electrical Codes and the following instructions.
- Disconnect switch or a circuit breaker must be provided and marked as the disconnecting device.
- Disconnect switch/circuit breaker must be within reach of operator.

CAUTION: **RISK OF ELECTRICAL SHOCK.** Turn power off at service panel before beginning installation. Never wire energized electrical components.

CAUTION: **USE COPPER CONDUCTOR ONLY**

Confirm device ratings are suitable for application prior to installation. Use of device in applications beyond its specified ratings or in applications other than its intended use may cause an unsafe condition and will void manufacturer's warranty.

NOTICE: Do not install if product appears to be damaged.

<p align="center"><strong style="color:red">SAVE THESE INSTRUCTIONS!</p>

Description

The Current NX Energy Module hosts the energy dashboard. The NX Energy Module is housed in an enclosure where its pre-wired and assembled on a DIN rail and connected to a DIN rail power supply. (See Figure 1)

The NX Energy Module contains a system processor, web server-based user interface, data storage and network interface components required for system operation.

The NX Energy Module connects with the NX network through the Area Controller using a standard Ethernet cable. A standard Ethernet connection is provided on the module itself which can be used to connect directly to the area controller customer Ethernet port. Additionally, the NX Energy Module can also be connected to the building LAN router. (See Figure 2)

The NEMA1 grade enclosure has a hinged locking door and is suitable for surface wall mounting in a conditioned electrical room.
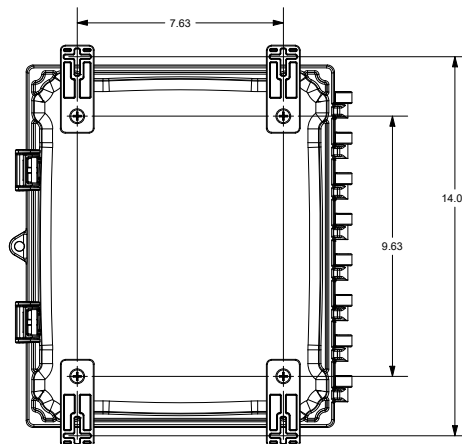

Figure 1.

3905D 100621

Figure 2: Network Connection

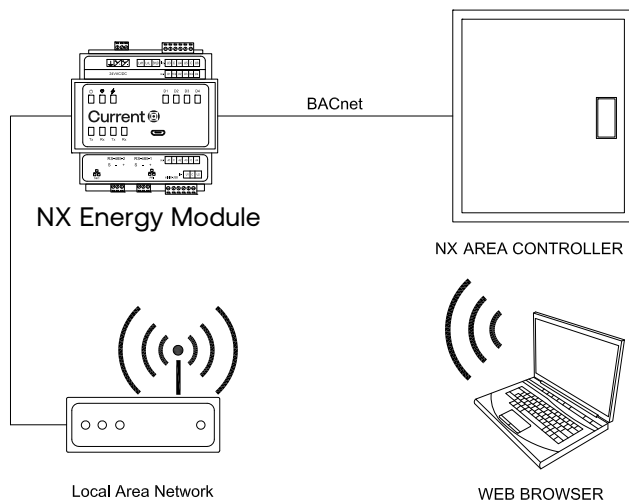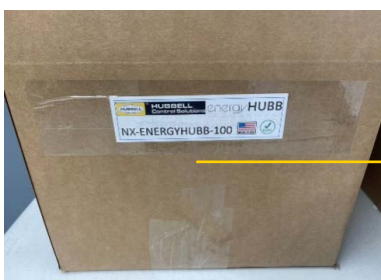Labels in figure: BACnet, NX Energy Module, NX AREA CONTROLLER, Local Area Network, WEB BROWSER

Package Content

- NX Energy Module Enclosure Assembly
- Installation Guide
- Mounting Foot with Screws (optional to use)
- Wall Mounting screws **not included**
- Ethernet patch cables are **not included**.

Packaging Box with Shipping Label

NX Energy Module Enclosure Assembly

Mounting Foot with Screws (in plastic bag)

3905D 100621

Installation

1. Do not install the NX Energy Module in an unconditioned space.
2. The NX Energy Module is shipped completely assembled but requires further installation and connections.
3. Identify a suitable location to mount the enclosure assembly. Ideally, it should be mounted right next to the NX Area Controller.
4. Wall mount the enclosure assembly using appropriate mounting screws (not included) according to the 4 mounting keyholes (See Figure 1). Note: An optional mounting foot with screws is provided for ease of wall mounting.
5. Open the enclosure door and identify the power cables (red and black wires.) Before proceeding further, flip open the circuit breaker mounted inside the enclosure. Now proceed with connection to a power source of 120V.

   Carefully follow the wire color markings on the power supply housing.

6. All additional connections to the NX Energy Module will be made using CAT5e cable with RJ-45 connectors.
7. The NX Energy Module module housed inside the enclosure comes with a 10/100 Base-T Ethernet connection via the RJ-45 Port. The RJ-45 port has two LEDs. When the device is connected to the network the blue LEDs are lit, and flash when there is network activity.
8. Connect one end of your CAT5e Ethernet cable to the RJ-45 port and the other end to the Ethernet port on the NX Area Controller. See Figure 3 & 4.
9. Use the second Ethernet port on the NX Energy Module module to connect your PC. See Figure 3 & 4.

   As an alternative option, if the user wants to connect the NX Energy Module to their building LAN network, use the second RJ-45 port on the module to connect the building router instead of the PC. Refer to the diagram in Figure 2.

10. Route the Ethernet and power cables through the provided knock-outs as shown in Figure 3.
11. Make sure to close the enclosure door once all connections and installation is complete.
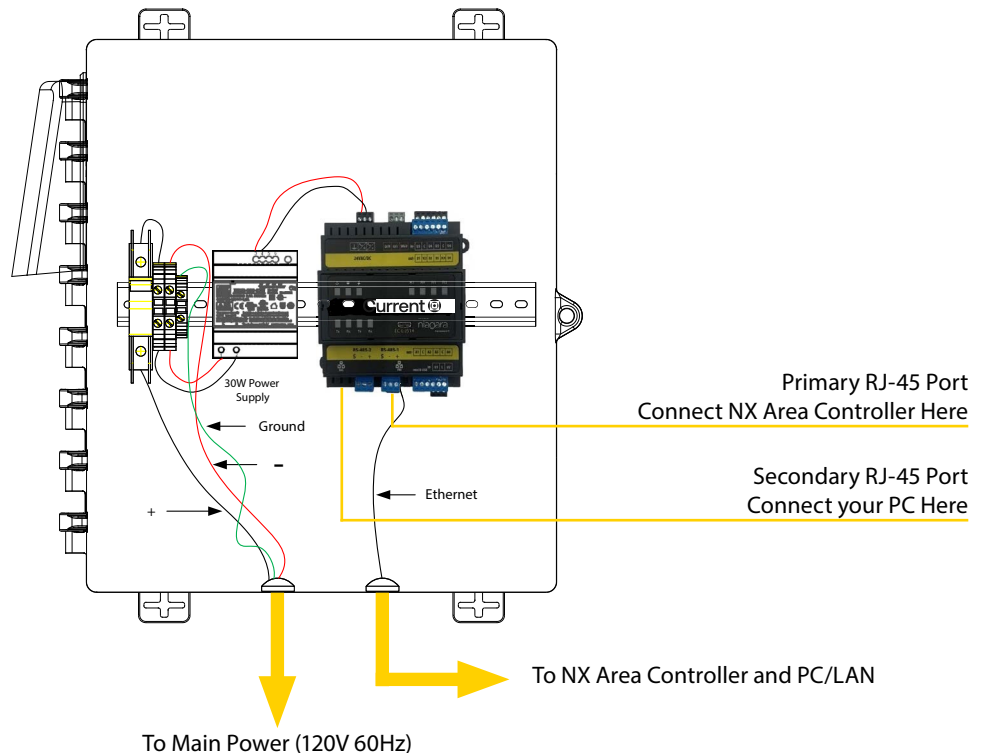

Figure 3: Key Access Points

3905D 100621

From NX Energy Module

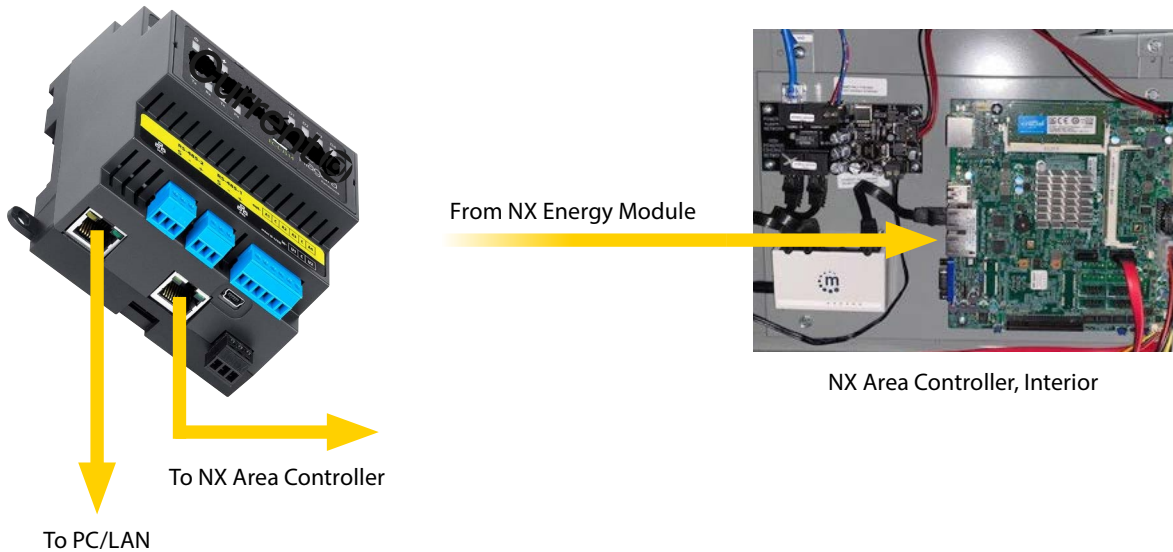NX Area Controller, Interior

To NX Area Controller

To PC/LAN

Figure 4: Network Connections

Starting Up NX Energy Module and Dashboard

1. Energize the circuit feeding the NX Energy Module to power it up. Make sure to close the circuit breaker next to the NX Energy Module module inside the enclosure.
2. Ensure the PC is connected to the system and to the NX Area Controller as described in the previous section.
3. There are two RJ-45 Ethernet ports on the NX Energy Module (as shown in Figure 4). The primary port is dedicated for connection to the NX Area Controller. Its default static IP address is **192.168.1.2**
4. The secondary port of your NX Energy Module ships with a static default IP address (**192.168.0.3**) from the factory. This port is dedicated for customer connection, such as to your PC or your building LAN router.
5. To ensure NX Energy Module has been connected properly and functioning, you need to connect your PC directly to the NX Energy Module and make sure you can get to the dashboard login in screen.

   In order to do this, you will need to follow some steps outlined below, starting with changing your computer's network adapter settings to be in the same network as the NX Energy Module.

6. In your network adapter settings, click on "Change Adapter Settings", then click "Ethernet".

a. Go to Ethernet Properties and select "Ethernet Protocol Version (TCP/IPv4) as shown above.

b. Manually enter the IP address (as shown below). The IP address must be **192.168.0.x** where x must be a number other than 3 (it can be anywhere between 4 and 250). The subnet field should populate automatically as you enter the IP address.
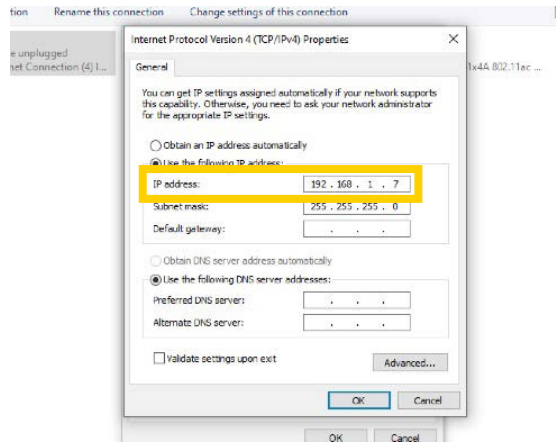
c. Click OK when done.

7. Open your browser (Internet Explorer or equal) and type **192.168.0.3** into the URL address line at the top of the page and press "Enter". This is the default IP address of the NX Energy Module as shipped from the factory.

The NX Energy Dashboard Login Screen* will now appear.
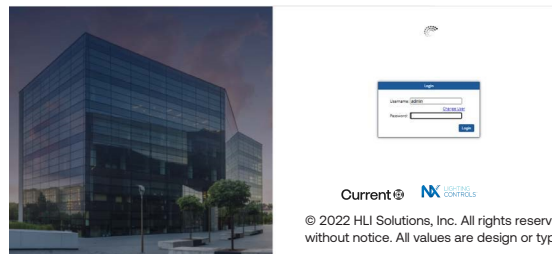
8. Use the following default login details to log into the web portal:

   Default user name: **admin**
   Default password: **EnergyHUBB**

9. Upon a successful login, you are now ready to handover the configuration of the NX Energy Dashboard and BACnet integration to your startup technician.

- There is no guarantee that the network can still be discovered and commissioned successfully by the startup technician.
- It is contingent upon all devices in the system being connected properly and functioning.
- Work with your start-up technician to find out if there are any wiring, connection or functionality issues in the system.
- Refer to the NX Energy Module User Guide for complete details on network configuration and steps for a successful system startup.

Please Note: Login screen design is subject to changes over time, however the log-in process will remain the same as described here.