

### Overview

With the NXS-NMS NetModule Shell (**FG2009-10**), one NetLinX Control Card can be installed, providing connectivity to the NetLinX bus via ICSNet connections.

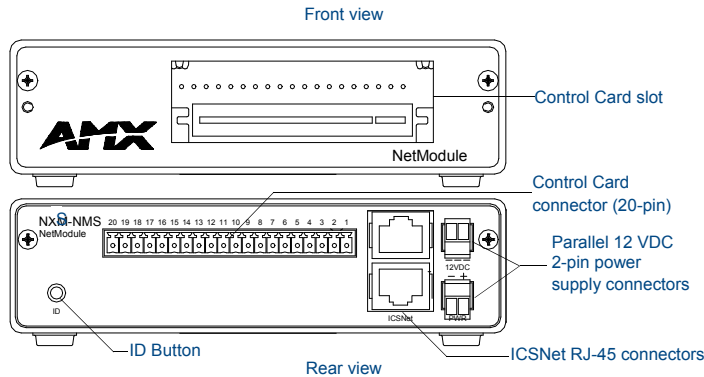
The NXS-NMS is a simple, economical option for integrating additional functionality into control systems, and it provides an enclosure for installing NetLinX (NXC) Control Cards.



**FIG. 1** NXS-NMS NetLinX NetModule shell

### Features

- Control connector: 20-pin black (male) connector that connects the NetModule Shell to external devices. These connectors are keyed to ensure proper installation
- ICSNet RJ-45 connectors: Receives power and data from a NetLinX Master/Hub ICSNet Port. An ICSNet port on a NetLinX Master or Hub supplies up to 500 mA at 12 V for module power
- 12 VDC power supply connectors: Two male 2-pin (green) connectors for 12 VDC power



**FIG. 2** NXS-NMS NetLinX NetModule shell

Specifications	
Dimensions (HWD):	1.50" x 5.55" x 10.28" (3.81 cm x 14.10 cm x 26.11 cm)
Weight:	2.15 lbs. (0.98 kg)
Power Requirement:	+12 VDC

### ID Button

The ID Button on the rear panel of the NetModules is used in conjunction with the NetLinX Studio software program to allow you to assign new Device and System numbers for the Module.

- Using NetLinX Studio, place the system in Identity (ID) Mode. ID Mode means that the entire system is put on hold while it waits for an event from any NetLinX device in the named system (for example, pushing the ID button on a Module). The device generating the first event is the device that is identified.
- Press the ID Mode button to generate an event from the Module to allow you to assign new Device and System numbers in NetLinX Studio.

### +12 VDC Power Supply Connectors

- Two parallel male 2-pin (green) parallel connectors for 12 VDC power. Connection to either power connector provides loop through power to the other connector.
- Connecting an external power source disconnects the NetModule from the power supplied via ICSNet.

### Control Card Connectors

To install a Control Card into a NetModule:

- Remove the magnetic front faceplate/viewing window from the NetModule.
- Align the edge of the Control Card with the slot Control Card slot on the front of the NetModule. Slide the card into the enclosure and press until you feel the Card seat in the connector.
- Put the magnetic faceplate back on the NetModule.

### Compatible NetLinX Control Cards

The NXS-NMS NetModule Shell accepts the following NetLinX Control Cards:

Compatible NetLinX Control Cards	
NXC-COM2	Dual COM Port Control Card
NXC-I/O10	Input/Output Control Card
NXC-IRS4	4-Port IR/S Control Card
NXC-REL10	Relay Control Card
NXC-VAI4	Analog Voltage Control Card
NXC-VOL4	Volume Control Card

### Device:Port:System (D:P:S)

A device is any hardware component that can be connected to an AXLink or NetLinX (ICSNet) bus. Each device must be assigned a unique number to locate that device on the bus.

NetLinX requires a Device:Port:System (D:P:S) specification.

The NetLinX programming language allows numbers in the range 0-32,000.

Device 0 (zero) refers to the master, and numbers greater than 32,000 are reserved.

This D:P:S triplet can be expressed as series of constants, variables separated by colons, or as a DEV structure. For example:

```

STRUCTURE DEV
{
  INTEGER Number // Device number
  INTEGER Port // Port on device
  INTEGER System // System device belongs to
}

```

The D:P:S notation is used to explicitly represent a device number, port and system. For example, 128:1:0 represents the first port on the device TP on this system.

If the Port and System numbers are omitted, Port #1 and System #0 (zero) are assumed. Here's a syntax sample:

```
NUMBER:PORT:SYSTEM
```

where:

- NUMBER: 6-bit integer representing the device number
- PORT: 6-bit integer representing the port number (in the range 1 through the number of ports on the Controller or device)
- SYSTEM: 6-bit integer representing the system number (0 = this system)

### NetLinX Device Number Conventions

NXS modules typically occupy the device number range from 5001 to 5999.

### Mounting Modules Into an Equipment Rack

The NetLinX Modules can be rack-mounted using an optional AC-RK Rack Mount Kit.