NetLinx® NX Integrated Controller

NX-3200 (FG2106-03)

Overview

The NX-3200 / NetLinx® NX Integrated Controller is a programmable network appliance specifically designed to control AV and building technology using multiple analog and digital formats. The NX-3200 provides a scalable platform for the future by combining high performance, backward compatibility and extensive network security features. The NX-3200 adds more ports to the NX-2200, giving it the ability to integrate a larger number of devices. The NX-3200 controls a wide variety of components including audio/video conferencing, projectors, DVD and Blu-ray players, lights, thermostats and other electronic equipment found in larger spaces. With these technology-driven environments, the NX-3200 also provides solutions for future expansion and enables the addition of more devices and control capabilities.

Common Applications

- The NX-3200 is ideally suited to the requirements of large lecture halls, board rooms, media rooms, and integrated homes with advanced control and automation features.
- With a large local port complement and enhanced security features like Dual NIC, the NX-3200 can handle greater challenges of a large AV system, conferencing, HVAC, lights, security, power management, and many similar specialized applications requiring extensive control with maximum physical ports.

Features

- **Larger Port Configuration** - 8/8/8/8 (Serial, Relay, IR, Digital I/O), versus 4/4/4/4 for the NX-2200
- **Dual NIC** – The LAN port is used to connect the master to an external network, and the ICSLAN ports connect to AMX or third-party A/V equipment isolated from the primary network, providing rock-solid security
- **IPv6 and wired 802.1x** – Supports modern networking standards for internet protocol IPv6 and port-based Network Access Control utilizing X.509 certificates for access to protected networks
- **High Performance Architecture, Flexible Programming Platform (RPM, NetLinx and Java)** – Easily scalable to support a wide range of applications for today and tomorrow
- **Full Line Compatible (Backwards and Cross-Compatibility)** – Standardized port numbers and new configuration import/export tools mean fewer coding changes
- **Enhanced Diagnostics On Serial and IR Ports** – Provides real time error feedback when Serial and IR ports are disconnected or improperly wired
- **File Import / Export From USB Drive** – Backup and restore configuration data, program files, and update firmware from a standard USB flash drive

- **Hardware / Software Built for 24/7/365 Operation** – Provides outstanding reliability and improved diagnostics
- **Ultra-Fast 1600 MIPS processor**
- **512 MB Onboard RAM**
- **1 M Non-Volatile Memory**
- **8 GB SDHC FLASH Memory**
- **1 RU**
- **2 AXLink Interface**
- **1 10/100 LAN Interface**
- **1 10/100 ICSLan Interface**
- **8 Digital I/O Ports**
- **2 RS232/422/485 Ports**
- **6 RS232-Only Ports**
- **8 IR/Serial Output Ports**
- **8 Relay Ports**

Specifications

GENERAL	
Enclosure	Metal with black matte finish
Dimensions (HWD)	1 3/4" x 17" x 9 1/8" (44.85 mm x 431.80 mm x 231.64 mm)
Weight	6.08 lb. (2.758 Kg)
Certifications	FCC CFR Title 47 Part 15 CE EN 55022 CE EN 55024 CE EN 60950-1 IEC 60950-1 UL 60950-1 C-Tick CISPR 22 IC CISPR 22 VCCI CISPR 22 RoHS / WEEE Compliant
Included Accessories	•2-pin 3.5 mm mini-Phoenix (female) PWR connector (41-0002-SA) •4-pin 3.5 mm mini-Phoenix (female) AxLink connector (41-5047) •(2) 10-pin 3.5mm mini-Phoenix female RS-232/422/485 connectors (41-5107) •(6) 5-pin 3.5mm mini-Phoenix female RS-232 connectors (41-0336) •(2) 6-pin 3.5 mm mini-Phoenix female I/O connectors (41-5063) •(2) 8-pin 3.5 mm mini-Phoenix female Relay connectors (41-5083) •(2) CC-NIRC IR Emitters •Removable rack ears
Optional Accessories	•PSN6.5, 6.5 A Power Supply (FG423-41) •PSR4.4, 13.5 VDC, 4.4 A Power Supply with 3.5 mm Phoenix Connector with Retention Screws (FG423-46) •PSN4.4, 13.5 VDC, 4.4 A Power Supply with 3.5 mm Phoenix Connector (FG423-45) •CC-USB-NI, USB Programming Cable (FG10-2105) •CC-NIRC, IR Cables (FG10-000-11) •CC-NET, Cat5 Ethernet Cable (FG10-051-10) •CBL-ETH-FL, Ethernet Cat5e Flat Cable (FG10-2182-16)

	•EXB-IRS4, ICSLan IR/S Interface, 4 IR/S and 4 Inputs (FG2100-23) •EXB-COM2, ICSLan Serial Interface, 2 Ports (FG2100-22) •EXB-REL8, ICSLan Relay Interface, 8 Channels (FG2100-20) •EXB-I/O8, ICSLan Input/Output Interface, 8 Channels (FG2100-21) •EXB-MP1, ICSLan Multi-Port, 1 COM, 1 IR/S, 2 I/O, 1 IR RX (FG2100-26)

ACTIVE POWER REQUIREMENTS	
Voltage, DC (typical)	12 VDC
DC Current Draw	400 mA @ 12 VDC
Voltage DC Range	9 - 18 VDC
Power Connector	3.5 mm Phoenix with retaining screws

POWER CONSUMPTION	
Active Power Consumption	6.6 W

ENVIRONMENTAL	
Temperature (Operating)	32° F to 122° F (0° C to 50° C)
Temperature (Storage)	14° F to 140° F (-10° C to 60°C)
Humidity (Operating)	5% to 85% RH
Heat Dissipation (Typical)	22.5 BTU/hr

ONBOARD MASTER	
Processor	1600 MIPS
Program Port	(1) USB Standard B
Configuration Dip Switch	4-position
Status Indicator	Status LED (green) blinks to indicate that the system is programmed and communicating properly
Input Indicator	Input LED (yellow) blinks to indicate that the Controller is receiving data
Output Indicator	Output LED (red) blinks to indicate that the Controller is transmitting data
ID Pushbutton	Black ID pushbutton for setting IP mode and reverting to default configuration and firmware
USB Host Port	(2) USB Standard A, one on front and one on back, USB Host port supports Solid State drive for upgrading firmware, loading code files, copying configuration data and remote storage

MEMORY	
NVRAM	1 MB
Memory Card	8 GB SD
DDRAM	512 MB
Note	Supports external USB Solid State Drives

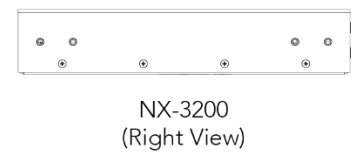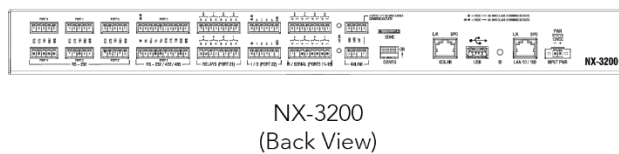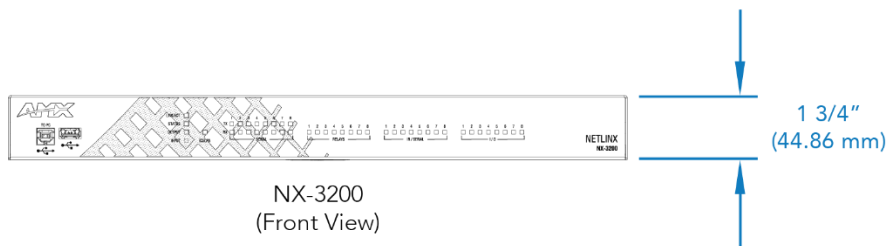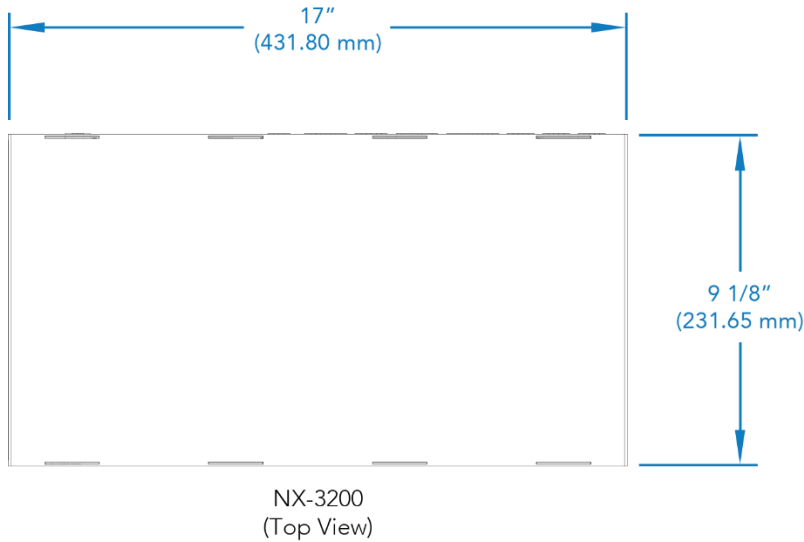| ETHERNET	
Connection	(1) RJ-45
Description	10/100 Port RJ-45 connector provides TCP/IP communication. Auto MDI/MDI-X enabled. Supports

	IPv4 and IPv6 networks. Supports HTTP, HTTPS, Telnet, FTP
Link/Act Indicator	Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ-45 connector and one on the front panel
Speed Indicator	Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbps
ICSLan	
ICSLan Connection	(1) RJ-45, 10/100 Port RJ-45 connector. Auto MDI/MDI-X enabled. Supports IPv4 and IPv6 networks. Supports HTTP, HTTPS, Telnet, FTP
ICSLan Link/Active Indicator	ICSLan LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ-45 connector and one on the front panel
ICSLan Speed Indicator	Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbps

CONTROL PORTS & INDICATORS	
AxLink Port	(2) 4-position 3.5mm Screw Terminal, provides data and power to external AxLink control devices
AxLink Indicator	(2) AxLink LED (green) indicates the state of the AxLink port
RS-232/422/485 Port	(2) 10-position 3.5mm Screw Terminal NetLinx Ports 1 and 5 XON/XOFF (transmit on / transmit off) CTS/RTS (clear to send/ready to send) 300 - 115,200 baud
RS-232 Port	(6) 5-position 3.5mm Screw Terminal NetLinx Port 2-4 and 6-8 XON/XOFF (transmit on / transmit off) CTS/RTS (clear to send/ready to send) 300 - 115,200 baud
Serial Indicator	(8) sets of LEDs (red/yellow) indicate when serial Ports 1-8 are transmitting and receiving data
IR/Serial	(8) 2-position 3.5mm Screw Terminal 8 IR Transmit / 1-way Serial ports NetLinx Ports 11-18 Support high-frequency carriers up to 1.142 MHz 8 IR/Serial data signals can be generated simultaneously
IR/Serial Indicators	(2) LEDs (red) indicate when each of the IR/Serial ports (11-18) are transmitting control data
I/O Channels	(8) One 10-position 3.5mm Screw Terminal 8-channel binary I/O port for contact closure with each input being capable of voltage sensing NetLinx Port 22 Channels 1-8
I/O Indicator	(8) LEDs (yellow) indicate each of the I/O channels (1-8) are active
Relays	(8) Two 8-position 3.5 mm Screw Terminal, (8) single-pole, single-throw relays NetLinx Port 21 Channels 1-8 Each relay can switch up to 24 VDC or 28 VAC @ 1 A

	Each relay is independently controlled
Relay Indicators	(8) LEDs (red) indicate when each of the relay channels (1-8) are active (closed)

For a more detailed pictorial drawing please visit: http://www.amx.com/products/NX-3200.asp

17"
(431.80 mm)

9 1/8"
(231.65 mm)

NX-3200
(Top View)

1 3/4"
(44.86 mm)

NX-3200
(Front View)

NX-3200
(Back View)

NX-3200
(Right View)

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