## Network Local Controller II (NLC II)

monitordynamics

The Network Local Controller II (NLC II) is part of Monitor Dynamic's SAFEnet Integrated Digital Controller line of hardware. The NLC II replaces the NLC + Communications board and functions as a local database server, message router and interface for a network of field devices. These field devices provide access control, intrusion detection, and facility control. The ability to handle up to 48 field devices means the NLC II provides a scalable system that can grow with future customer requirements.
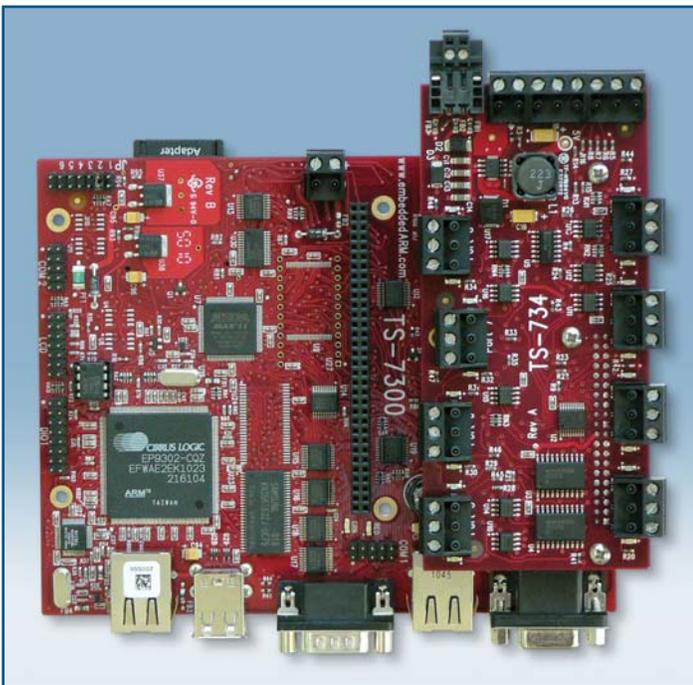
The NLC II stores data for 60,000 cardholders and passes the appropriate cardholder records to each SAFEnet Dual Door Controller (DDC). The DDC makes access control decisions for its two readers using its cardholder database. Access requests are made to the NLC II only when a card's data is not in the DDC database. If the data is among the 60,000 cardholders in the NLC II database, the NLC II makes the access control decision and passes it on to the DDC controller. Access requests are made to the host computer when the card data is not present in the NLC II cardholder database.

No time-consuming bulk downloading of card holder files is required. When a card is presented to any card reader for the first time the host computer downloads its data automatically to the NLC II, which in turn downloads the same data to all the field DDCs that require it. The NLC II supports Ethernet based TCP/IP IEEE 802.3, 10/100 BASE-T communications to the host over most industry standard LAN/WAN architectures. The NLC II accomplishes communications to the field devices using the industry standard RS-485 for downstream communications.

Features:
- Provides a functionally unified system of access control, alarm monitoring and facility controls
- Flexibility by configuring the mixture of field devices fitting each application
- Stores data for 60,000 cardholders
- 10,000 events stored during communications disruption with host computer
- ARM-9 microprocessor provides high speed data processing
- True Time Clock
- RS-485 bus allows field devices to be located up to 5000 feet from NLC II
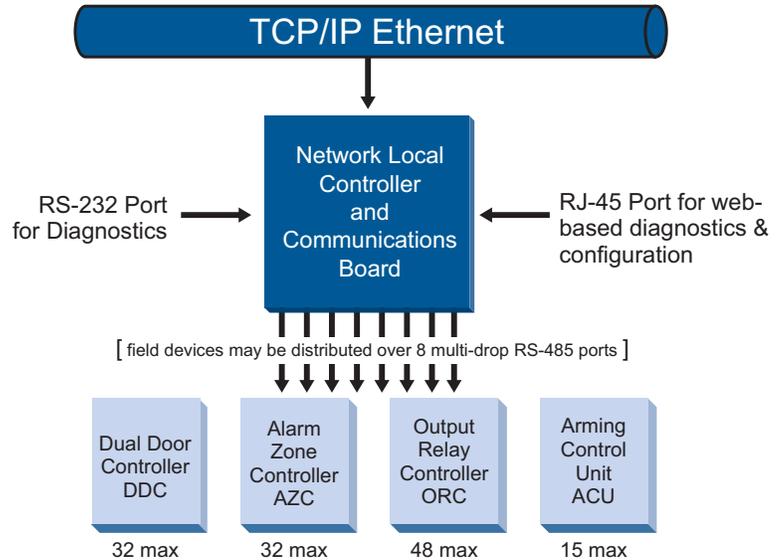
New Features
- 100 MB Network Connection
- Web Browser Interface
- FTP Capability Through Web Browser
- Flash Card Memory-Up to 2 GB
- Debian GNU/Linux - Operating System
- USB Ports
- Backup Dial Modem

The NLC II is configured with diagnostics ports and web capability which allows field service and other technical personnel to view activity, perform diagnostic analysis, input initial setup parameters, and make some configuration changes emotely over the Internet, or on-site via USB.

Technical Specifications - Integrated Digital Controller Hardware

Network Local Controller II (NLC II)

TCP/IP Ethernet

RS-232 Port for Diagnostics → Network Local Controller and Communications Board ← RJ-45 Port for web-based diagnostics & configuration

[field devices may be distributed over 8 multi-drop RS-485 ports]

Dual Door Controller DDC	Alarm Zone Controller AZC	Output Relay Controller ORC	Arming Control Unit ACU
32 max	32 max	48 max	15 max

Primary Panel Features:

Electrical

Power	6-16 VDC
Current Draw	NLC - 120mA maximum

Dimensions

Width	5.5 in. (139.7 mm)
Length	4.5 in. (114.3 mm)
Height	1.0 in. (26 mm)

Environment

Temperature	32ºF-120ºF, (0ºC-50ºC)
Humidity	10%-95% (non-condensing)

Memory

Read Only	SD Card Flash Memory
Random	32 MB SDRAM
Cardholders	60,000
Event Storage	10,000 on loss of communications

Host Communications

Network Compatibility	TCP/IP Ethernet
Media Type	Twisted Pair RJ-45 Category 5 cable
Diagnostic Port	RS-232 & RJ-45

Field Device Communications

Protocol	RS-485, 19.2Kbps
Number of Channels	8
Distance	4,000 feet per channel
Media Type	Twisted Pair (Belden 9841 cable)

Supported Field Device Types

Field Devices	Any combination of 128 software addresses per NLC
Dual Door Controller	32 maximum (2 software addresses)
Output Relay Controller	48 maximum (2 software addresses)
Alarm Zone Controller	32 maximum (4 software addresses)
Arming Control Unit	15 maximum (1 software address)

Design and specifications subject to change without notice.

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