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NION-2DRN Access Control

Section: Network Systems

GENERAL

The NION-2DRN is a programmable, intelligent device capable of controlling a basic card-access node with two readers and two doors. The NION-2DRN incorporates embedded microprocessor technology and nonvolatile memory to input, store, and process configurations for card-access operations based on user-definable schedules and access codes.

The NION-2DRN can run in stand-alone or network modes. It can support event scheduling, I/O mapping, facility/time/holiday code assignment, and anti-passback configuration. Each node can also support two Weigand, Magstripe, or card-plus-PIN format readers, four supervised inputs, two request-to-exit buttons, and four relay outputs.

Configuration is performed using a laptop running Windows® 2000 with the NION-2DRN graphical configuration utility, or from the UniNet™ graphical workstation. Baud rate and other serial communication parameters are field selectable.

The NION-2DRN can also communicate with the UniNet™ integrated facilities monitoring system and the Building Communications Interface (BCI) product lines. All UniNet™ system components are based on LonWorks™ technologies for full integration. When using the UniGuard™ application and a UniNet™ network, the NION-2DRN can be configured remotely (including over wide-area BCI networks).

The NION-2DRN is a single motherboard, manufactured using surface-mount technology. Each unit comes standard with 512K of nonvolatile RAM with battery backup. All connections are made using plug-in screw terminals, except the serial communications port which uses an RJ12 connector.

The NION-2DRN employs several methods of protection. All of the terminals are transient protected. The UniNet™ connection is transformer isolated. This offers a highly reliable system and reduces spare parts inventory.

The serial port can also be used as an output for a local serial event printer (PRN-5) when not in use for configuration.

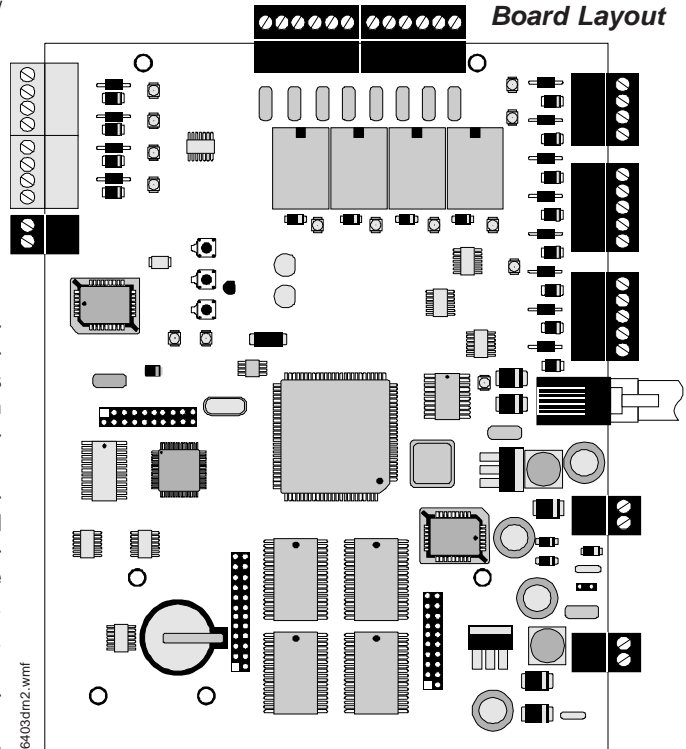
FEATURES

- Stand-alone or network operation.
- Accepts two card-reader inputs.
- Two-man rule programming.
- Separate Door Release and Door Ajar timers.
- Programmable Door Lock On, Door Open, or Door Close.
- Battery-backed memory holds over 10,000 card holders.
- 512K memory standard.
- Serial port for laptop configuration or event printer (PRN-5).



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**NION-2DRN
Board Layout**



6403dm2.wmf

- Two supervised (four-state) Request To Exit buttons.
- Status, power, diagnostic, and I/O LEDs.
- Four supervised (four-state) dry-contact inputs and control-relay outputs.
- Transformer-coupled network connection.
- Transient protection on all terminals.
- Powered from auxiliary UL-Listed power supply for 12 VDC or 24 VDC.
- Field-selectable baud rate settings.
- Standard wall-mount enclosure with optional tamper switch.
- UL Listed to Standard 294.

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This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact NOTIFIER. Phone: (203) 484-7161 FAX: (203) 484-7118



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APPLICATIONS

The NION-2DRN is used to monitor and control two card-reader inputs and up to two doors for access control. Whether running stand-alone or as a component on the UniNet™ network, the NION-2DRN is an independent control unit which maintains a completely configurable database of card users, schedules, time codes, holidays, and access codes.

The NION-2DRN can be used anywhere localized protection and access control is needed for a pair of doors. It can also be networked to provide the same protection for several nodes at a single site or across an entire campus or multiple sites. All alarm and access information can be reported and controlled from a central station or multiple workstations.

INSTALLATION

The NION-2DRN is mounted in a standard wall-mount enclosure near the doors being controlled. Reader connections are made using five-conductor wire. Two connections are required to enable the NION-2DRN to establish network communication, the UniNet™ via an appropriate SMX transceiver and 24 VDC power. The power comes from an auxiliary UL-Listed power supply. EIA-232 connection for laptop configuration is made via an RJ12 connector.

SPECIFICATIONS

- UL Listed to Standard 294.
- Powered from any UL-Listed auxiliary power supply.
- Power requirements: field-selectable 24 VDC @ 0.25 A or 12 VDC @ 0.4 A.
- Long-life battery for nonvolatile RAM with voltage monitoring.
- Ground fault detection.
- 512K battery-protected RAM.
- Two configurable card reader inputs.
- Supports Weigand, Magstripe, and card-plus-PIN formats.
- Five-wire card-reader connections with 5 VDC power and data.
- Four four-state, supervised inputs.
- Two four-state, supervised request-to-exit buttons.
- Four dry-contact relay outputs rated at 30 VDC @ 5 A.
- Enclosure tamper switch (*optional*).
- Can be configured using a laptop running Windows® 2000 with the NION-2DRN graphical configuration utility, or from the UniNet™ graphical workstation.
- Serial port can be used for a local event printer (**PRN-5**).
- Can operate and be configured in network or stand-alone mode.
- Transient protection on all terminals.
- Transformer-coupled network connection.
- Communicates on LonWorks™-based network operating at 78.5Kbaud over twisted-pair wire or multimode fiber.
- Network connections via standard screw terminals, EIA-232 connections via RJ12 connectors.
- Operating temperature range: 0°C to 49°C (32°F to 120°F).
- Storage temperature range: -40°C to +80°C (-40°F to 176°F).
- Mounts in standard, locking wall enclosure: 9" wide (22.860 cm) x 12" (30.480 cm) high x 2.75" (6.985 cm) deep (**NISCAB-1**).

ORDERING INFORMATION

NION-2DRN: Single NION-2DRN, supports 2 doors, 2 REXs, 4 inputs, 4 outputs. Includes 512K, nonvolatile, battery-backed memory.

For use on a UniNet™ network, order one SMX transceiver (FTXC, S7FTXC, FOXC, or DFXC), and one interface protocol (EP2-2DRN-FT, or EP2-2DRN-DF).

FTXC: SMX transceiver, network media interface for NION, for wire-based FT-10 topology.

S7FTXC: Style 7, free-topology, UniNet™ 2000 Echelon®-based transceiver. *Order with EP2-2DRN-FT.*

FOXC: SMX transceiver, network media interface for NION, for fiber-optic-based FT-10 topology.

DFXC: SMX transceiver, network media interface for NION, for bidirectional fiber-optic-based FO-10 topology.

EP2-2DRN-FT: NION-2DRN interface protocol for FT-10 and point-to-point fiber-optic media.

EP2-2DRN-DF: NION-2DRN interface protocol for bidirectional fiber-optic media.

NISCAB-1: 16-gauge sheet metal enclosure 9.25" (23.495 cm) wide x 12.25" (31.115 cm) high x 2.75" (6.985 cm) deep; *order separately.*