



October 21, 2002

DN-6918 • A0-820

NION-2C8M Discrete Input/Output Node

Section: Network Systems

GENERAL

The **NION-2C8M** (2-Control/8-Monitor) is a general-purpose module for monitoring inputs and controlling outputs. It works with the **UniNet™ 2000** integrated facilities monitoring network and the **Building Communications Interface (BCI)** product lines. Like all UniNet™ components, it is based on LonWorks™ technology.

The NION-2C8M provides eight supervised inputs for dry contacts plus two SPDT relay outputs. Each input has alarm and trouble LEDs to indicate which input is active or in open circuit. Similarly, each output has an LED to indicate relay activity. Each input and output has a unique address. The inputs are supervised with an end-of-line resistor. Shorting the circuit will cause an alarm and opening the circuit will cause a trouble. The NION-2C8M also has LEDs for status, indicating normal operation, and for network binding, indicating proper network configuration.

All points can also utilize a scheduling plug-in application on the network which provides tools for input enabling and disabling and output activation and deactivation on a user-defined schedule.

The NION-2C8M contains the transceiver and network communications software. It accepts and sends standard UniNet™ 2000 messages.

To provide reliable operation, the NION-2C8M employs several protection methods. Transient protection is provided on all terminals, and the network connection is transformer isolated.

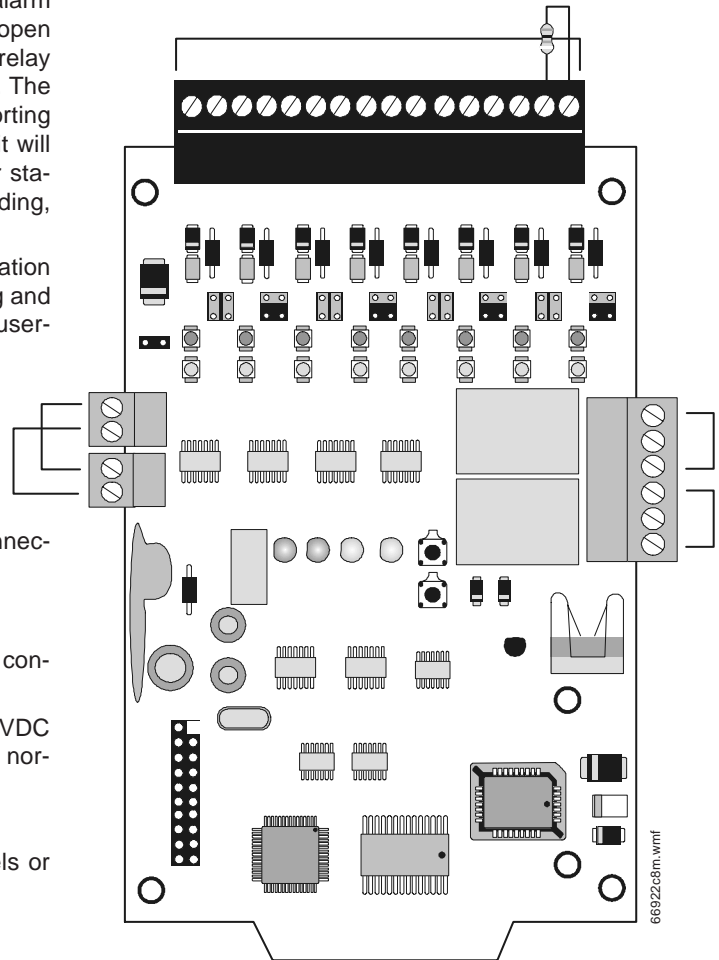
FEATURES

- Accepts Normally Open and Normally Closed dry contact inputs.
- Control outputs are SPDT relays rated 5 A @ 30 VDC and can be configured for either normally open or normally closed operation.
- Network scheduling application.
- Can be powered by 24 VDC from monitored panels or auxiliary UL-Listed power supply.
- Status, service, input and output LEDs.
- Normally Open Inputs are supervised by end-of-line resistors.
- Transformer-coupled network connection.
- Listed to UL 864.
- Transient protection on all terminals.



California State Fire Marshal
7300-1525:102

MEA
292-98-E
156-97-E



NION-2C8M Board Layout

- Standard wall-mount enclosure (**NISCAB-1**) or multi-board chassis (**CHS-4L**) with a capacity of up to four modules with **CAB-3/4 Series** enclosures.

UniNet™ is a trademark of NOTIFIER. Echelon® is a registered trademark and LonWorks™ is a trademark of Echelon Corporation.

NOTIFIER® is a Honeywell company.

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



12 Clintonville Road, Northford, Connecticut 06472



Made in the U.S.A.

APPLICATIONS

The NION-2C8M is used with the UniNet™ 2000 integrated facilities monitoring network and the Building Communications Interface (BCI) products. The NION-2C8M provides a gateway to the UniNet™ for equipment and control panels that have dry contacts. It allows conventional panels and equipment to operate on the same network as equipment with an EIA-232 output.

INSTALLATION

The NION-2C8M can be mounted in a standard wall-mount enclosure adjacent to the control panel or the monitored equipment. Optionally, a multi-board chassis (**CHS-4L**) will accommodate up to four NIONs with **CAB-3 Series** or **CAB-4 Series** enclosure. Two connections are required for the NION-2C8M to establish communications: the UniNet™ and 24 VDC power. Power can come from the monitored equipment or an auxiliary UL-Listed power supply. Standard screw terminals connect wiring from monitored equipment.

SPECIFICATIONS

- Underwriters Laboratories Listed as a component of an 864 Proprietary Receiving System.
- **Power requirements:** 24 VDC @ 0.10 A.
- **Powered from** monitored control panel or UL-Listed auxiliary power supply.
- **Communicates** on LonWorks-based **FT-10** network operating over twisted-pair wiring or fiber-optic cable.
- **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).
- **Accepts** up to eight inputs and two outputs in any combination.
- **Connections** via standard screw terminals.
- **Mounts** in 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 (**NISCAB-1**).
- Optional multi-board chassis (**CHS-4L**) for use with **CAB-3 Series** or **CAB-4 Series** enclosure.

ORDERING INFORMATION

When ordering a NION-2C8M, select one SMX transceiver (FTXC, S7FTXC, FOXC, or DFXC) and one interface protocol (EP-2C8M-FT, EP-2C8M-DF).

NION-2C8M: General-purpose network input/output node, provides 8 supervised inputs for dry contacts and 2 SPDT relay outputs.

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 EP-2C8M-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.

EP-2C8M-FT: NION-2C8M interface protocol for FT-10 and point-to-point fiber-optic media.

EP-2C8MNCS-FT: NION-2C8M interface protocol for FT-10 and point-to-point fiber-optic media, plus NCS.

EP-2C8M-DF: NION-2C8M interface protocol for bidirectional fiber-optic media.

EP-2C8MNCS-DF: NION-2C8M interface protocol for bidirectional fiber-optic media, plus NCS.

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.*