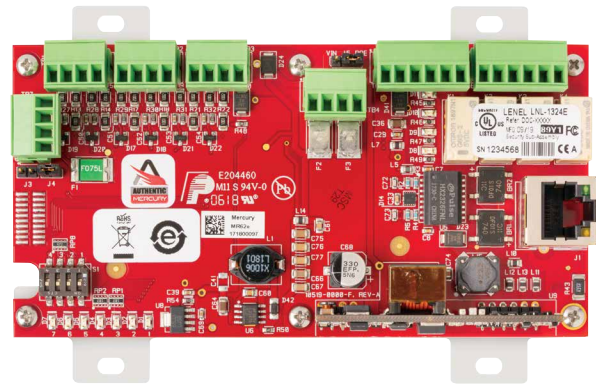# LNL-1324e

Flexible Network-Connected Door I/O Module

Overview

The LNL-1324e is a flexible network-wired hardware module that interfaces readers with Open Supervised Device Protocol (OSDP™) for two doors; or acts as an alarm panel (I/O points) to the OnGuard system (version 7.6 or higher).

The LNL-1324e module allows doors or auxiliary I/O to be conveniently wired to an OnGuard system using structured cabling and Ethernet, rather than via dedicated RS-485 wiring. When combined with a compatible Lenel Intelligent System Controller, this allows either a 100% Ethernet solution or a hybrid system to be deployed, depending on the security and IT infrastructure considerations of the installation. The LNL-1324e module provides the same local I/O linking and fallback options as traditional serial-connected modules, but with the convenience and flexibility of network connection.

The LNL-1324e module can be configured in one of two operating modes. When in the network-connected dual door controller mode, the LNL-1324e module allows each door to have the following configuration: one or two OSDP readers to be connected, controlling the door; one auxiliary input and one auxiliary relay output are also available, in addition to dedicated exit request and door contact inputs and a door lock output relay. And, when in the network-connected I/O module mode, the LNL-1324e module allows up to six inputs and four relay outputs to be configured using the OnGuard access control system.

Features & Functionality

- Supports 10/100 Ethernet communications to Lenel X-Series Intelligent System Controllers
- Advanced Encryption Standard 256-bit encryption supported
- Mounts into a standard ANSI/NEMA triple gang switch box for a compact footprint
- Firmware stored in flash memory; background download of firmware updates supported
- Custom or standard end-of-line resistors supported

Features when in network-connected single door controller mode:

- OSDP reader port supports four OSDP reader addresses
- Paired or single reader support per door
- Supports OSDP, including biometric template transfer and Secure Channel encryption
- Two outputs; one dedicated for a strike and one general purpose (Form C, 2A @ 30Vdc) per door
- Two fixed inputs for door contact and request to exit (REX) per door
- Two programmable auxiliary inputs, one for each door

### Features when in network-connected I/O module mode:

- Four general-purpose auxiliary relay outputs (Form C, 2A @ 30Vdc)
- Six programmable auxiliary inputs (supervised or unsupervised)

Extended Functionality:

- Connect supported FIPS-201 readers for embedded authentication (when used with LNL-X4420 and appropriate OnGuard software, licenses and third-party hardware)

LNL-1324e

System Diagram
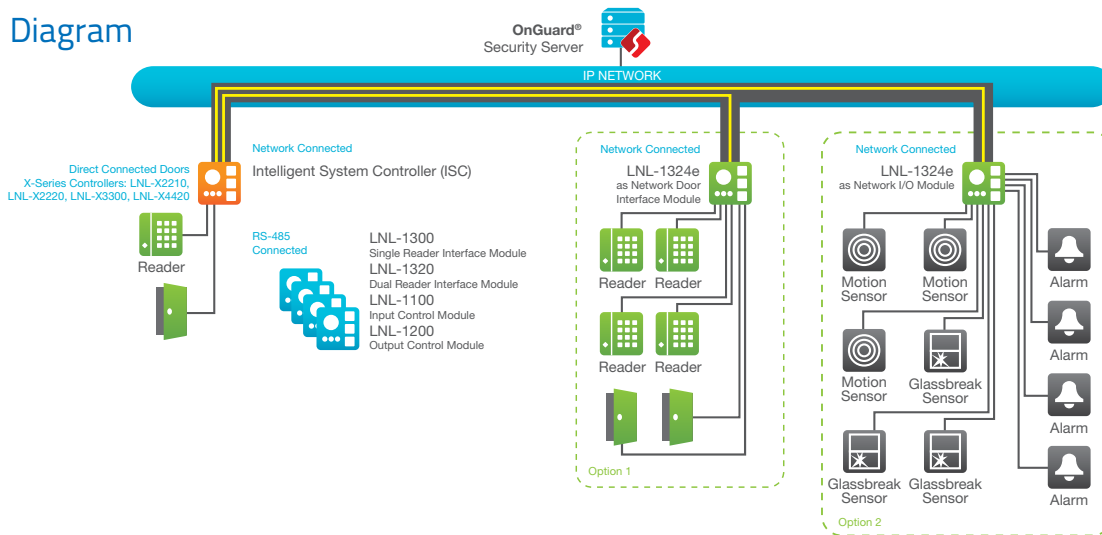
Specifications

The interface is for use in low voltage, Class 2 circuits only.	
The installation of this device must comply with all local fire and electrical codes.	
Primary Power	PoE (12.95 W), compliant to IEEE 802.3af or PoE+ (25 W), compliant to IEEE 802.3at or 12 Vdc ±10%, 1.7 A maximum
Power Output	PoE: VO (TB4-1) and RVO (TB7-4), combined: 12 Vdc @ 0.66 A PoE+ or external 12 Vdc: VO (TB4-1) 12 Vdc @ 1 A max, RVO (TB7-4) 12 Vdc @ 0.5 A max
Communication	Ethernet: 10-BaseT/100Base-TX
Inputs	Six unsupervised / supervised, standard EOL: 1k/1k ohm, 1%, 1/4 watt
Outputs	Four relays: Form-C contacts: 2 A @ 30 Vdc resistive

Reader Interface

Power	12 Vdc @ 0.5 A max (RVO, TR7-4)
Communications	2-Wire RS-485, OSDP™ protocol, four device max.

Cable Requirements

External Input Power	1 twisted pair, 18 AWG (if required)
Communications	Ethernet, CAT-5, minimum
Alarm Input	1 twisted pair per input, 30 ohms maximum, typically 22 AWG @ 1000 ft. (304.8m)
Relay Outputs	As required for the load
Reader Data and Power*	RS-485/power: 2 twisted pair with shield, 24 AWG, 120 ohm impedance and Power* 4000 ft. (1220m) maximum
	Or
	RS-485: 1 twisted pair with shield, 24 AWG, 120 ohm impedance, 4000 ft. (1220m) maximum and Power: 1 pair 18 AWG*
	*Type of cable(s) and gauge determined by length and voltage/current requirements. Local power source may be required.

Mechanical

Dimensions (W x L x H)	5.5 x 2.75 x 0.96 in. (140 x 70 x 24 mm) without bracket 5.5 x 3.63 x 1.33 in. (140 x 92 x 34mm) with bracket
Weight	4.0 oz. (112g) without bracket 5.0 oz. (142g) with bracket

Environmental

Temperature	-55 to 85°C, storage 0 to 70°C, operating
Humidty	5 to 95% RHNC
Heat Output (BTUs)	at 12 VDC, 8.2 BTU/hr
Approvals	FCC Part 15, CE, RoHS, UL 294, UL 1076, CAN/ULC 60839-11-1:2016, CSA C22.2 No. 205-1983, cUL/ORD-C1076

Parts and Spare Parts

Part No.	Description
LNL-1324e	IP Door Interface, OSDP readers only. Two door support, max four OSDP readers. Power options: PoE, PoE+ or 12 VDC. One aux input and one aux output per door.
LNL-1300-TAMPER	Tamper cable for LNL-2210, LNL-X2210, LNL-1300, LNL-1330-S3, LNL-1300E, LNL-1324e
LNL-RPL-MTG-3G	Replacement mounting plate for LNL-2210, LNL-X2210, LNL-1300E, LNL-1324e with 4-40 screws

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Specifications subject to change without notice.

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