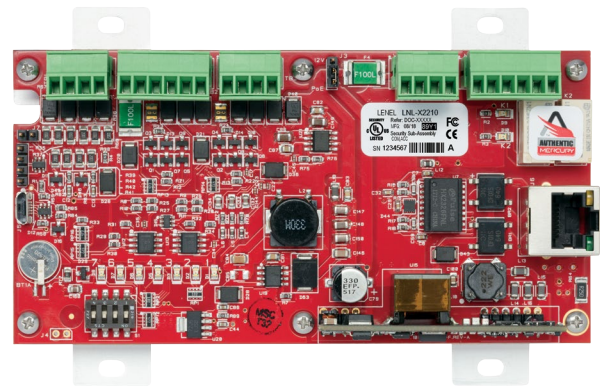


LNL-X2210

Intelligent Single Door Controller



Overview

The LNL-X2210 Intelligent Single Door Controller (ISDC) is an edge device that provides a solution for interfacing one or two readers to a single door within an OnGuard® system. Offering innovation at an economical price point, the LNL-X2210 controller is a high-performance, Ethernet-ready card reader panel that controls a single opening with 802.3af/802.3at compliant Power over Ethernet (PoE). Built on a proven platform, the LNL-X2210 controller seamlessly interfaces to a larger system for flexible, reliable expansion. Easy installation with PoE makes this the logical choice for single door control.

Once configured, the LNL-X2210 controller functions independently of the host and is capable of sophisticated processes while controlling access for a single opening. Without host intervention, the LNL-X2210 controller can relate selected system devices and their activity to other onboard devices, consistently allowing those activities and actions to transpire independently.

The LNL-X2210 controller is capable of interfacing with a wide array of reader technologies for single opening control. Reader ports support separate in/out readers and technologies that include Wiegand, clock and data, RS-485, OSDP™, keypads, LCD and biometrics — resulting in the flexibility, versatility and reliability needed for success.

An alternative configuration is available with OnGuard version 6.6 and higher for the LNL-X2210 controller. The first physical reader port can be configured to support RS-485 communication bus to LNL Door Interfaces (LNL-1300/LNL-1320) or IO devices (LNL-1100/LNL-1200). Up to eight RS-485 addressed devices can be supported on this communication bus. These additional devices must have a local power supply. In this configuration, the second physical reader port on the LNL-X2210 controller is still available for standard single reader interface; it is not available as an OSDP Reader.

Features & Functionality

Controller Functionality

- 6 MB of available on-board, non-volatile flash memory
- Firmware stored in flash memory, background download of firmware updates supported
- Optional secondary communications available through a USB to Ethernet connection
- RNDIS support enables USB connection to display controller web configuration pages

Access Control

- 240,000 cardholders, 50,000 event transaction buffer
- Up to 128 access levels per cardholder
- Programmable card activation and deactivation times and dates
- Individual extended held open and strike times (ADA required)

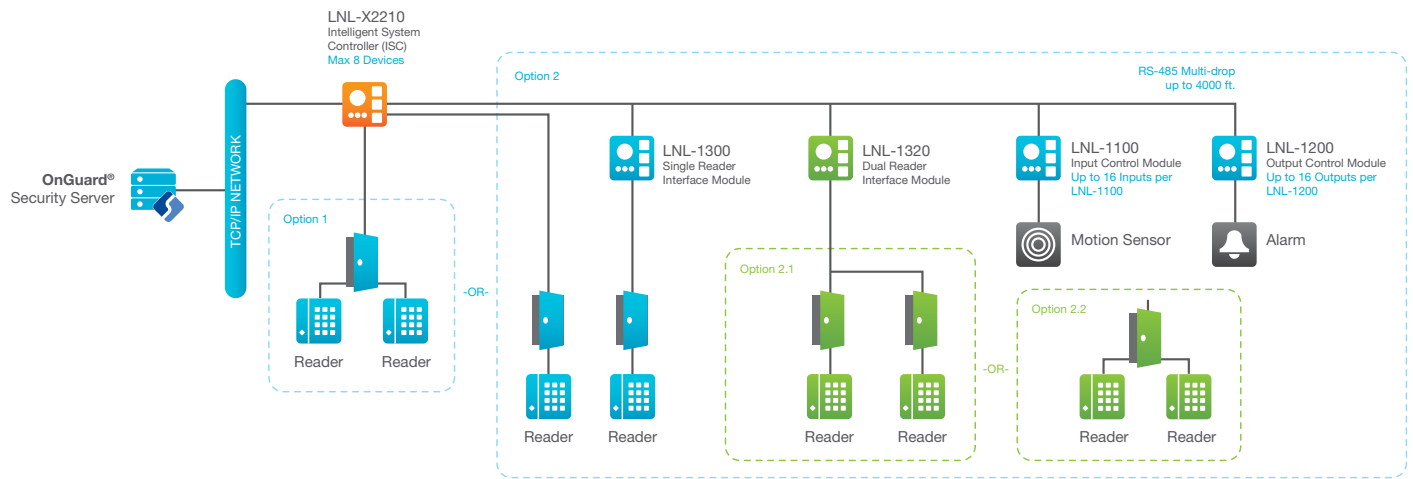
Card Formats

- Up to sixteen active card formats per LNL-X2210
- PIV, CAC, and TWIC card compatible
- Magnetic stripe, proximity, iClass®, multiClass, MIFARE®, DESFIRE®, biometric template support

Advanced Functionality

- Advanced Encryption Standard (AES) 256-bit algorithm for communications to Series 3 reader and I/O modules; AES 128-bit encryption to Series 2 reader and I/O modules
- AES128 or TLS 1.2 (with AES256 support) communication to OnGuard
- Enhanced anti-passback capabilities: nested global hard or soft anti-passback, timed anti-passback, two person control, designated one or two person control, tail gate control and occupancy limit
- Configurable option for Data at Rest encryption
- Standard or custom end of line resistance

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 \pm 10%, 1.8 A maximum |
| Power Output | PoE: 12 VDC @ 625 mA including reader and Auxiliary Power output PoE+ or external 12 VDC: 12 VDC @ 12.5 A including reader and Auxiliary Power output |
| Primary Host Communication | Ethernet: 10-BaseT/100Base-TX |
| Secondary Host Communication | USB port (2.0) with optional adapter: pluggable model USB2-OTGE100 |
| Inputs | Two unsupervised / supervised, standard EOL: 1k/1k ohm, 1% 1/4 watt |
| Outputs | One unsupervised dedicated for cabinet tamper Two relays: Form-C contacts: 2 A @ 30 VDC resistive |

Reader Interface

| | |
|---------------|---|
| Power | 12 VDC \pm 10% regulated, PoE, PoE+ or local power, 300 mA maximum |
| Data Inputs | Reader port 1: TTL compatible, F/2F or 2-wire RS-485 Reader Port 2: TTL compatible or F/2F |
| LED Output | TTL levels, high > 3 V, low < 0.5 V, 5 mA source/sink maximum |
| Buzzer Output | Open collector, 12 VDC open circuit maximum, 40 mA sink maximum |

Cable Requirements

| | |
|----------------------|---|
| Power | One twisted pair, 18 AWG (when using local 12 VDC power supply) |
| Ethernet | CAT-5, minimum |
| Reader Data (TTL) | 6-conductor, 18 AWG, 500 ft. (152m) maximum |
| Reader Data (F/2F) | 4-conductor, 18 AWG, 500 ft. (152m) maximum |
| Reader Data (RS-485) | One twisted pair, shielded. 24 AWG, 120 ohm impedance, 2,000 ft. (610m) maximum |
| Alarm Input | One twisted pair, 30 ohms maximum, typically 22 AWG @ 1,000 ft. (304.8m) |
| Outputs | As required for the load |

Mechanical

| | |
|------------|---|
| Dimensions | 5.5 W x 2.75 L x 0.96 H in. (140 x 70 x 24mm) without bracket 5.5 W x 3.63 L x 1.33 H in. (140 x 92 x 34mm) with bracket |
| Weight | 3.6 oz. (103g) without bracket 4.43 oz. (125.5g) with bracket |

Environmental

| | |
|--------------------|--|
| Temperature | -55° to +85° C, storage 0° to +70° C, operating |
| Humidity | 5 to 95% RHNC |
| Heat Output (BTUs) | at 12 VDC, 13.3 BTU/hr |
| Approvals | FCC Part 15, CE, RoHS, UL 294, UL 2610 |

Parts and Spare Parts

| Part No. | Description |
|-----------------|--|
| LNL-X2210 | 6 MB on-board flash memory available for cardholder database; 50,000 event backed RAM for event log. |
| USB2-OTGE100 | USB to Ethernet converter, for LNL-X Series Controllers only. Provides optional Secondary NIC connection. Second NIC should be on different subnet than primary NIC. |
| LNL-1300-TAMPER | Tamper cable for LNL-2210, LNL-X2210, LNL-1300, LNL-1330-S3, LNL-1300E. |
| LNL-RPL-MTG-3G | Replacement mounting plate for LNL-2210, LNL-X2210, LNL-1300E with 4-40 screws. |



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Specifications subject to change without notice.

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