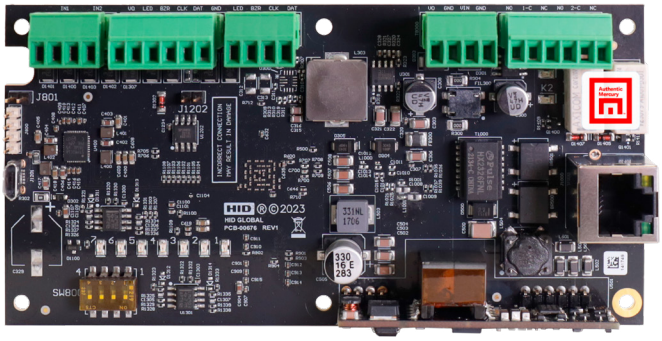
LNL-M2210

Intelligent Single Door Controller



Overview

The LNL-M2210 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-M2210 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/PoE+). Built on a proven platform, the LNL-M2210 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-M2210 controller functions independently of the host and is capable of sophisticated processes while controlling access for a single opening. Without host intervention, the LNL-M2210 controller can relate selected system devices and their activity to other onboard devices, consistently allowing those activities and actions to transpire independently.

The LNL-M2210 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 7.6 and higher for the LNL-M2210 controller. The first physical reader port can be configured to support RS-485 communication bus to LNL Door Interfaces (LNL-1300/LNL-1320) or I/O 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-M2210 controller is still available for standard single reader interface; it is not available as an OSDP Reader.

Features & Functionality

Controller Functionality

- Secure 32 bit processor with multi-application operating system
- 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

Access Control

- 240,000 cardholders, 500,000 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)

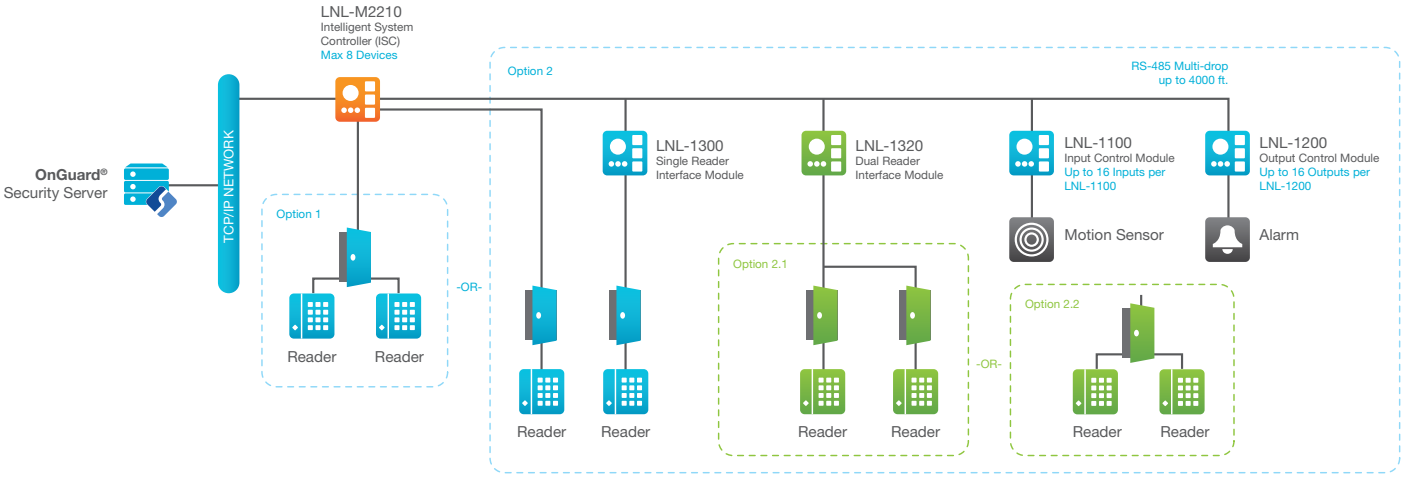
Card Formats

- Up to sixteen active card formats per LNL-M2210
- 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
- TLS 1.2 / 1.3 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, tailgate 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 ± 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 @ 1.25 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
	One unsupervised dedicated for cabinet tamper
Outputs	Two relays: Form-C contacts: 2 A @ 30 VDC resistive
RTC Backup	Super capacitor
Reader Interface	
Power	12 VDC ± 10% regulated, PoE, PoE+ or local power, 600 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

Parts and Spare Parts

Part No.	Description
LNL-M2210	6 MB on-board flash memory available for cardholder database; 500,000 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-M2210, LNL-1300, LNL-1330-S3, LNL-1300E.
LNL-RPL-MTG-3G	Replacement mounting plate for LNL-2210, LNL-X2210, LNL-M2210, LNL-1300E, LNL-1324E with 4-40 screws.

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Specifications subject to change without notice.