## Lenel<sup>®</sup> Controller

# LNL-X3300

## Intelligent System Controller

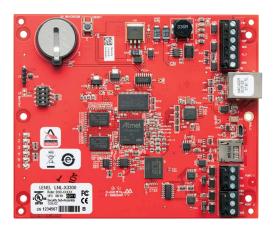


#### Overview

The LNL-X3300 Intelligent System Controller (ISC) is designed for advanced access control applications. As the access control engine for the OnGuard<sup>®</sup> system, the ISC provides power and functionality. The ISC can communicate to the host computer in a single- or dual-path Ethernet configuration. Multiple combinations of Input Control Modules, Output Control Modules and Card Reader Interface Modules (up to 64 devices) can be configured.

Utilizing its native Ethernet communications and an advanced 32-bit processor, the LNL-X3300 can communicate upstream to the host computer through its primary Ethernet port, with throughput up to 8 times greater than the fastest serial connections. Additionally, the LNL-X3300 offers an optional secondary communications option, through a USB to Ethernet connection.

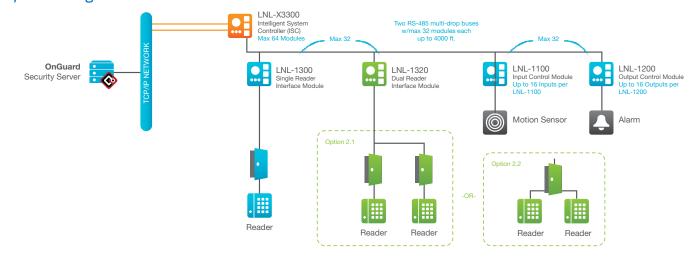
The LNL-X3300 can store up to 500,000 cardholders in nonvolatile flash memory, and supports selective download for larger cardholder databases. The two downstream RS-485 2-wire ports can be used to connect up to 64 devices (64 doors) in many combinations of LNL-1100, LNL-1200, LNL-1300, and LNL-1320 as well as to older devices like the LNL-500B and LNL-500W modules.



### Features & Functionality

- $\cdot$  DHCP and fixed IP addressing supported
- DNS device naming through DHCP extended commands
- Optional Secondary NIC, USB port (2.0) with optional adapter
- 15 MB of available on-board, non-volatile flash memory
- Battery-back, non-volatile storage of 50,000 events
- Configurable option for Data at Rest encryption
- Firmware stored in flash memory, background download of firmware updates supported
- 12 or 24 VDC input power
- Supports up to 16 badge formats
- Biometric template storage support
- Up to 32,000 access level permissions
- 255 holidays with grouping
- · 255 timezones, each with 6 intervals
- Elevator control support for up to 128 floors
- Supports up to 9-digit user PIN codes
- Status LEDs for heartbeat & battery status, upstream and downstream communication, and memory write status
- $\boldsymbol{\cdot}$  Two dedicated inputs for tamper and power failure status
- Advanced Encryption Standard (AES) 256-bit algorithm for communication to Lenel Series 3 reader and I/O modules; AES 128 bit encryption with Lenel Series 2 reader and I/O modules
- AES128 or TLS 1.2 (with AES256 support) communication to OnGuard
- RNDIS Support to allow USB connection to display controller web configuration pages

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	12 to 24 VDC ± 10%, 250 mA maximum
Primary Host Communication	Ethernet: 10-BaseT/100Base-TX
Secondary Host Communication	USB port (2.0) with optional adapter: pluggable model USB2-OTGE100
Serial I/O Device	Two each: 2-wire RS-485, 2,400 to 115,200 bps, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit
Inputs	Two non-supervised, dedicated for cabinet tamper and power fault monitoring
Cable Requirements	
Power and Relays	One twisted pair, 18 AWG
Ethernet	CAT-5, minimum
RS-485	One twisted pair with drain wire and shield, 120 ohm impedance, 24 AWG, 4,000 ft. (1,219m) maximum
Mechanical	
Dimensions	5.0 W x 6.0 L x 1.0 H in. (127 x 152.4 x 25mm)
Weight	4.1 oz. (115g) nominal
Environmental	
Temperature	-55° to +85° C, storage
	0° to +70° C, operating
Humidity	5 to 95% RHNC
Heat Output (BTUs)	at 12 VDC, 10.2 BTU/hr
	at 24 VDC, 12.3 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-X3300	15 MB on-board flash memory available for cardholder database; 50,000 event battery 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.



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Specifications subject to change without notice.

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