

# LNL-3300

## Intelligent System Controller



### Overview

The LNL-3300 Intelligent System Controller (ISC) by Lenel is designed for advanced access control applications. As the access control engine for the OnGuard® system, the ISC provides power and functionality. The ISC can communicate to the host computer in a single- or dual-path configuration of Ethernet, dial-up or direct connect RS-485 communication. 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-3300 can communicate upstream to the host computer through its primary Ethernet port, with throughput up to 8 times greater than the fastest serial connections. The secondary port can communicate at up to 115.2 Kbps using 2-wire RS-485 multidrop, dial-up, or an Ethernet daughterboard connection.

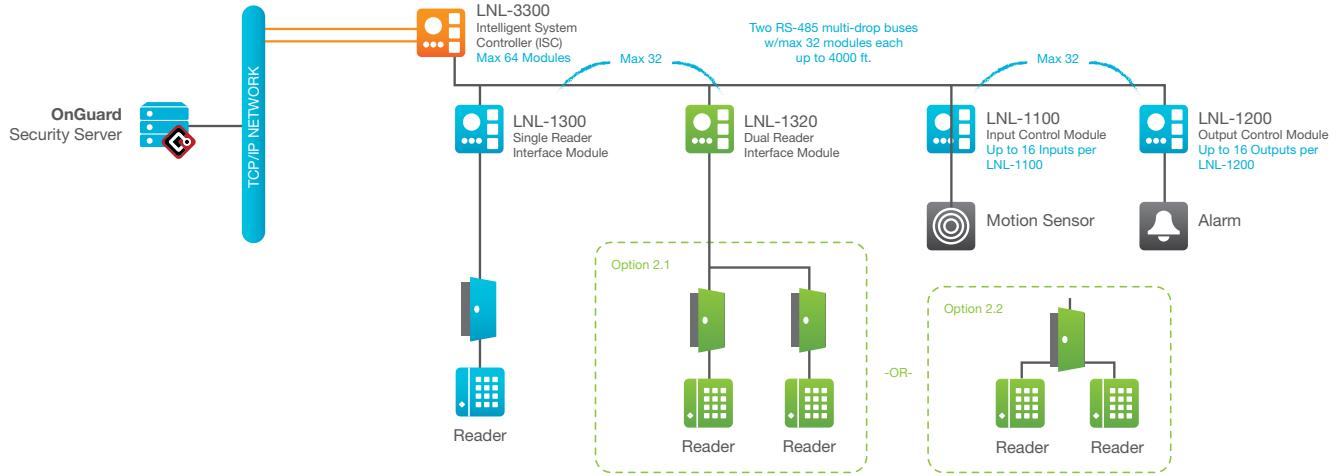
The LNL-3300 can store up to 500,000 cardholders in non-volatile flash memory, and supports selective download for larger cardholder databases. The two downstream RS-485 2-wire ports can be used to connect up to 64 devices (64 doors) in many combinations of LNL-1100, LNL-1200, LNL-1300, LNL-1320, LNL-500B, and LNL-500W modules.

### Features & Functionality

- On-board high-speed Ethernet 10/100Base-T upstream port provides up to 8 times higher throughput than serial-to-Ethernet converters. DHCP and fixed IP addressing supported.
- DNS device naming through DHCP extended commands
- Host dual path communication enabled - on-board Ethernet TCP/IP, direct wire (RS-485, 2-wire multidrop capable) on dial-up communications
- 15 MB of available on-board, non-volatile flash memory
- Battery-back, non-volatile storage of 50,000 events
- Firmware stored in flash memory, background download of firmware updates supported
- 12 or 24 VDC input power
- Supports up to 16 different formats
- Biometric template storage support
- Enhanced anti-passback capabilities
- 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
- Alarm masking
- Individual extended held open and strike times (ADA required)
- Up to 9-digit user PIN codes
- Status LEDs for heartbeat & battery status, upstream and downstream communication, and memory write status
- Two dedicated inputs for tamper and power failure status
- Advanced Encryption Standard (AES) 128-bit algorithm for communication to reader and I/O modules
- AES128 or TLS1.1 (with AES256 support) communication to OnGuard

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## System Diagram



## Controller Features

LNL-3300	15 MB On-board flash memory available for cardholder & asset database
	50,000 event battery backed RAM for event log
<b>Secondary Host Communications</b>	
LNL-ETHLAN-MICR	CoBox Micro serial server, flash ROM, RJ-45 (10/100Base-T), diagnostic LEDs, dimensions 1.6 x 1.9 in. (40 x 49mm), internally powered and includes standoffs
<b>Dial-Up Modem</b>	
LNL-DC336K	12 VDC-powered/33.6 K external modem for Intelligent System Controller

## Specifications

<b>Primary Power (DC or AC)</b>	
*The LNL-3300 is for use in low voltage, power-limited, class 2 circuits only.	
DC input	12 or 24 VDC ± 15%. 500 mA maximum
AC input	12 VAC ± 15%. 400 mA RMS
Memory and Clock backup	3V lithium, type BR2325, BR2330, CR2330
<b>Communication Ports</b>	
Primary (Ethernet) Port 0	10/100Base-T Ethernet high-speed port
Secondary Upstream Port 1	RS-485 (2-wire) or RS-232 9600 to 115.2 Kbps async, optional Ethernet serial server
Downstream Ports 2-3:	RS-485 (2-wire) 9600 to 38.4 Kbps async
<b>Inputs</b>	
Cabinet Tamper Monitor	Unsupervised, dedicated
Power Fault Monitor	Unsupervised, dedicated

## Wire Requirements

Power	1 twisted pair, 18 AWG
RS-485	24 AWG twisted pair(s) with shield, 4000 ft. (1219 m) maximum
RS-232	24 AWG, 25 ft. (7.6m) maximum
Inputs	Twisted pair, 30 ohms maximum

## Environmental

Temperature	Operating: 32° to 158°F (0° to +70°C) Storage: -67° to 185°F (-55° to +85°C)
Humidity	0 to 95% RHNC

## Mechanical

Dimensions	5 x 6 x 1 in. (127 x 152.4 x 25mm)
Weight	4 oz. (115g) nominal
Approvals	FCC Part 15, CE, RoHS, UL 294, UL 1076, ULC CSA-C22.2, CAN/ULC-S319-05, cUL/ORD-C1076



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