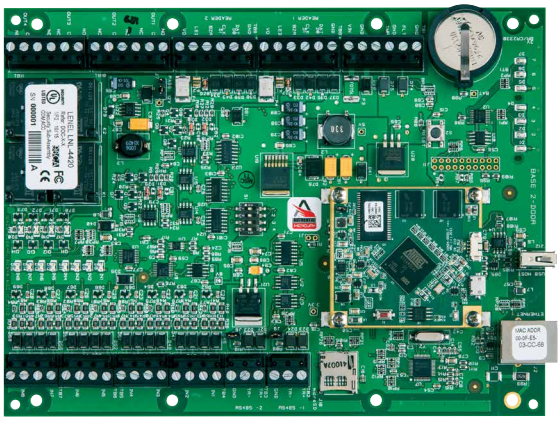
LNL-4420

Advanced Dual Reader Controller



Overview

The LNL-4420 is an Advanced Dual Reader Controller by Lenel that provides a single-board solution for interfacing up to 64 doors, plus auxiliary inputs and outputs, to an OnGuard® system.

The LNL-4420 controller enables Ethernet connection directly from an entry location to the OnGuard server. The controller is scalable for most access control applications. In addition, other I/O and reader interface modules can be added on the controller's two downstream ports, further expanding its capabilities. In the event of communication loss, the LNL-4420 controller can maintain most of its local functionality until the server connection is restored.

The LNL-4420 controller can act as in interface to building automation systems via the ASHRAE BACnet™ protocol. Through the OnGuard software, up to 63 total BACnet points can be defined. These can be a mix of physical inputs connected to the board and virtual outputs. Virtual outputs can be set and read from a connected BACnet client, allowing two-way state exchange with a variety of building control systems. This information can be used by both OnGuard and the external system for status reporting, and as inputs to control logic.

Utilizing its 32-bit processor and a multiple-application operating system, the LNL-4420 controller can communicate upstream to the host computer through its Ethernet port. The LNL-4420 controller can store more than 1,000,000 cardholders in non-volatile flash memory (depending on configuration), and supports selective download for larger cardholder databases. The two downstream RS-485 two-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, LNL-500W, Schlage® PIM-400 wireless interface (requires OnGuard version 7.5 or higher), or Assa Abloy Aperio® wireless devices.

Each LNL-4420 controller supports up to 16 different card formats. The LNL-4420 controller also includes eight inputs — four designated for door interface support and four for general-purpose inputs.

Features & Functionality

Controller Functionality

- BACnet protocol support via up to 63 total inputs and virtual outputs
- Support for DHCP and fixed IP addressing
- DNS device naming through DHCP extended commands
- 96 MB of available on-board, non-volatile flash memory for badge data, plus dedicated storage for future apps and extensions
- Battery-backed, non-volatile storage of 50,000 events
- Firmware stored in flash memory, background download of firmware updates supported
- Support for up to 16 different formats
- Biometric template storage support for Bioscrypt® and ANSI/INCITS 378 templates
- Advanced anti-passback capabilities
- Up to 32,000 access level permissions total (255 per badge)
- Elevator control support for up to 128 floors
- Individual extended held open and strike times (ADA required)
- A dedicated input for cabinet tamper and power failure status
- Advanced Encryption Standard (AES) 128-bit algorithm for communications to downstream reader and I/O interfaces
- AES128 or TLS1.2 (with AES256) communication to OnGuard

Reader Interface Functionality

- Support for Data1/Data0, Clock/Data, Unsupervised F2F and OSDP™-compatible RS-485 readers and keypads, including OSDP Secure Channel (SC) encrypted communications

Extended Functionality

- Optional onboard HID® pivCLASS® or Technology Industries EntryPoint™ FIPS-201 Embedded Authentication (consult Lenel for OnGuard and third party requirements)

LNL-4420

Specifications

Power Supply	
Primary Power	12 or 24 VDC ± 10%. 500 mA maximum (reader current not included)
Memory and Clock Backup Battery	3 V lithium, type BR2325, BR2330, CR2330
Communication Ports	
Host Communications	Ethernet Port, 10/100Base-TX
SIO Downstream Ports	Two each, 2-wire RS-485, 9600 to 38.4 Kbps async
Inputs	
Tamper and Power Fail Monitors	Unsupervised, dedicated
Door position, REX	4, each programmable as normally open or normally closed, supervised or unsupervised circuits
AUX	4, each programmable as normally open or normally closed, supervised or unsupervised circuits
Outputs	
Relay Outputs	Four Form-C 5A@30 VDC, resistive, relay outputs: two for strike, two for auxiliary outputs
Reader Interface	
Reader Power (Jumper Selectable)	DC output: 12 VDC, +/- 10% regulated, current limited to 150mA for each reader
	12 to 24 VDC, +/- 10% (input voltage pass through) current limited to 150 mA for each reader
Data Inputs	TTL: Wiegand Data1/Data0, Magnetic Clock/Data, Unsupervised F2F single-wire protocol (Note: Supervised F2F supported on connected door controllers but not for the two onboard ports)
	RS-485: 9600 baud, Bioscrypt RS-485 or OSDP (Open Supervised Device Protocol); OSDP Secure Channel, Transparent Mode and biometric templates supported
Building Automation Interface	Supports ASHRAE BACnet™ protocol
Environmental	
Operating Temperature	32° to 158° F (0° to +70° C)
Storage Temperature	-67° to +185° F (-55° to +85° C)
Humidity	0 to 95% Relative Humidity, Non-Condensing (RHNC)
Mechanical	
Dimensions	6.0" x 8.0" x 1.0" (152mm x 203mm x 25mm)
Weight	10.65 oz. (302g) nominal

Ordering Information

Part No.	Description
LNL-4420	Advanced Dual Reader Controller

LENEL·S2
United Technologies

LenelS2.com

(866) 788-5095

Specifications subject to change without notice.

2018/11 (GSP-2463)