Lenel LNL-1320-S3

Lenel LNL-1320-S3 Dual Reader Interface Module User Manual

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the Lenel LNL-1320-S3 Dual Reader Interface (DRI) Module. The LNL-1320-S3 is designed to integrate various access control card readers and keypads into a robust security system, supporting both standard Wiegand and RS-485 Open Supervised Device Protocol (OSDP) communication.

2. SAFETY INFORMATION

- Always disconnect power before installing or servicing the module.
- Ensure installation is performed by qualified personnel in accordance with local electrical codes and regulations.
- Do not expose the module to moisture or extreme temperatures.
- Use only approved power supplies and cables.
- Avoid touching electronic components directly to prevent electrostatic discharge (ESD) damage.

3. PRODUCT OVERVIEW

The Lenel LNL-1320-S3 Dual Reader Interface module is a critical component for expanding access control capabilities. It supports a wide range of card readers, keypads, or readers with keypads that utilize standard Wiegand Data1/Data0 or Clock/Data communication, as well as the bidirectional RS-485 OSDP. This module facilitates secure and flexible access management by supporting various card formats and offline access modes.

Key Features:

- Supports two readers per module.
- Compatible with Wiegand Data1/Data0 and Clock/Data communication.
- Supports RS-485 Open Supervised Device Protocol (OSDP).
- Supports lock, unlock, and facility code offline access modes.

- Accommodates up to 16 different card formats.
- Supports issue codes for magnetic and Wiegand card formats.

Figure 1: The Lenel LNL-1320-S3 Dual Reader Interface Module. This image displays the red circuit board with various electronic components, connectors for reader inputs, and communication ports, illustrating its compact design for integration into access control systems.

4. SETUP AND INSTALLATION

4.1 Components Required:

- Lenel LNL-1320-S3 Dual Reader Interface Module
- Compatible Card Reader(s) and/or Keypad(s)
- Power Supply (appropriate for the system)
- Wiring (Wiegand Data1/Data0, Clock/Data, or RS-485)
- Enclosure (if not already provided)

4.2 Installation Steps:

1. **Mounting:** Securely mount the LNL-1320-S3 module within a suitable enclosure, ensuring adequate ventilation and protection from environmental factors.

2. **Power Connection:** Connect the module to a stable power supply according to the wiring diagram provided in the full installation guide (not included here). Verify correct voltage and polarity.

3. **Reader Wiring:** Connect the card readers or keypads to the designated reader ports on the LNL-1320-S3. Ensure proper wiring for Data1/Data0, Clock/Data, or RS-485 communication, as applicable.

4. **Host Controller Connection:** Connect the LNL-1320-S3 to the main access control panel or host controller using the appropriate communication interface (e.g., RS-485).

5. **Configuration:** Refer to the access control system software documentation for configuring the LNL-1320-S3 module, including reader types, card formats, and access privileges.

6. **Testing:** After installation and configuration, thoroughly test all connected readers and access points to ensure proper functionality.

5. OPERATING INSTRUCTIONS

5.1 Reader Communication:

The LNL-1320-S3 module communicates with connected readers using either Wiegand (Data1/Data0 or Clock/Data) or RS-485 OSDP protocols. The module automatically processes data received from the readers and transmits it to the host access control system for authentication.

5.2 Card Formats:

The module supports up to 16 different card formats, allowing for flexibility in credential management. Configuration of these formats is performed within the access control software, enabling the system to recognize and validate various types of access cards.

5.3 Offline Access Modes:

In the event of communication loss with the host controller, the LNL-1320-S3 supports several offline access modes, including lock, unlock, and facility code. These modes ensure basic access control functionality is maintained, enhancing system resilience.

6. MAINTENANCE

- **Regular Inspection:** Periodically inspect the module and its connections for any signs of damage, loose wiring, or corrosion.

- **Cleaning:** Keep the module free from dust and debris. Use a soft, dry cloth for cleaning. Do not use liquid cleaners.

- **Firmware Updates:** Check with Lenel support or your system integrator for available firmware updates to ensure optimal performance and security.

- **Environmental Control:** Ensure the operating environment remains within specified temperature and humidity ranges to prevent component degradation.

7. TROUBLESHOOTING

Issue	Possible Cause	Solution
Reader not responding	Incorrect wiring, power issue, reader fault, incorrect configuration.	Verify wiring connections, check power supply to reader and module, test reader functionality, review software configuration.
Module not communicating with host	RS-485 wiring issue, incorrect address, host controller fault.	Check RS-485 wiring for continuity and polarity, confirm module address in software, verify host controller status.

Issue	Possible Cause	Solution
Access denied for valid card	Incorrect card format, access level issue, database synchronization problem.	Verify card format configuration, check user's access levels, ensure database synchronization between host and module.

8. SPECIFICATIONS

Feature	Detail
Brand	Lenel
Model Name	LNL 1320 S3
Connectivity Technology	RS-485 Open Supervised Device Protocol (OSDP)
Compatible Devices	Card readers, keypads, or readers with keypads using standard Wiegand Data1/Data0 or Clock/Data communication and bidirectional RS-485 OSDP
Included Components	Card Reader(s), Keypad(s) (Note: These are compatible components, not necessarily included with the module itself)
Item Weight	13.1 ounces
Product Dimensions (LxWxH)	10 x 7 x 1 inches
Color	Black (referring to the overall system, module itself is red)

9. WARRANTY AND SUPPORT

For specific warranty information regarding your Lenel LNL-1320-S3 Dual Reader Interface Module, please refer to the documentation provided at the time of purchase or contact your authorized Lenel dealer or system integrator. Lenel provides technical support and resources to assist with product inquiries, installation, and troubleshooting. Please visit the official Lenel website or contact their customer service for assistance.