NGP-1300-U
Universal Series IO

Overview

Lenel Systems International offers a Single Door Interface (SDI) module for access control solutions. Access control card readers, keypads, or readers with keypads that use standard Wiegand Data1/Data0 or Clock/Data communication are supported. Each SDI can support both in and out readers at a single door location. Lock, unlock, and facility code offline access modes are supported on all readers connected to the SDI. Each SDI supports up to eight different card formats as well as issue codes for both magnetic and Wiegand card formats.

The SDI provides a vital link between the NGP Controller and the card reader attached to the interface. As many as 24 SDI modules can be multidropped using RS-485 2-wire communication up to 4,000 feet (1219 m) per port away from the NGP Controller. Each SDI module is individually addressed for increased reporting capabilities with OnGuard access control software applications. The SDI includes four inputs that support normally open, normally closed, supervised, and non-supervised circuits. Two output relays support fail-safe or fail-secure operation.

FEATURES & FUNCTIONALITY

- 12 or 24 VDC power supply
- Supports Data1/Data0, Clock/Data readers and keypads
- Two Form-C relay outputs (5 A door strike and 5 A aux relays)
- Up to 8 different card formats
- Issue code support
- Downloadable firmware
- Four (4) supervised inputs, for Door Contact, REX push button monitor, and two general purpose inputs
- Four (4) unsupervised, dedicated for external (cabinet) tamper, off the wall tamper, low voltage and power fail
- Strike control output
- Bicolor or 2-wire reader status LED support
- Reader beeper control
- Optional metal mounting plate
- Support for offline reader access mode
Power Supplies & Enclosures

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<tbody>
<tr>
<td>LNL-AL400ULX</td>
<td>Lenel UL-listed 4 A, 110 VAC power supply - 12VDC 4A output, 120 VAC input, continuous supply current with enclosure (12 x 16 x 4.5 in. / 305 x 406 x 114 mm), lock and open frame transformer, tamper switch, UPS-capable (battery optional), UL-listed</td>
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<tr>
<td>LNL-AL600ULX-4CB6</td>
<td>Lenel UL-listed power supply - 12VDC 6A output, 120 VAC (1.6 A) input, continuous supply current with enclosure (18 x 24 x 4.5 in. / 457 x 610 x 114 mm), lock and open frame transformer, tamper switch, UPS-capable (battery optional), UL-listed</td>
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<tr>
<td>ABT-12</td>
<td>Battery Kit - 12VDC, 12 AH battery (PS-12120)</td>
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<tr>
<td>LNL-CONV-1U</td>
<td>Metal adapter plate to mount single full-size Universal Series IO Board (NGP-1100-U, NGP-1200-U, or NGP-1320-U) in any CTX enclosure, maximum two per LNL-CTX enclosure or maximum six per LNL-CTX6. Dimensions 8.1” x 6”.</td>
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<tr>
<td>LNL-CONV-2U</td>
<td>Metal adapter plate to mount a two LNL-1300 or NGP-1300-U in any CTX enclosure, maximum two per LNL-CTX enclosure or maximum six per LNL-CTX6. Dimensions 8.1” x 6”.</td>
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Specifications

**Primary Power (DC)**

- The SDI is for use in low voltage, power-limited, class 2 circuits only.
- **DC Input**
  - 12 to 24VDC + 10%
  - 700 mA @ 12VDC nominal (includes reader current), 230 mA @ 12VDC (without readers)
  - 350 mA @ 24VDC nominal (includes reader current), 115 mA @ 24VDC (without readers)
  - 28.7 BTU/hour
- **Reader Output**
  - 400 mA @ 12VDC max current limited
- **Reader Port Compatibility**
  - Wiegand Data1/Data0
  - Magnetic Clock/Data
  - F/2F single-wire protocol

**Environmental**

- **Temperature**
  - Operating: 14 to 158° F (-10 to +70°C )
  - Storage: -40 to 185°F (-40 to +85°C)
- **Humidity**
  - 10% at 93°C (199°F) non-condensing operating, 10 to 95% at 85°C (185°F) non-condensing storage
- **Approvals**
  - UL 294 and 1076-listed, FCC Part 15 Class A, CE-marked, RoHS compliant, C-Tick 22193, s319, WEEE

**Mechanical**

- **Dimension**
  - 4.75 x 2.75 x 1.25 in. (121 x 70 x 32 mm)
- **Weight**
  - 3.5 oz. (100 g) nominal
- **Approvals**
  - UL 294 and 1076-listed, FCC Part 15 Class A, CE-marked, RoHS compliant, C-Tick 22193

**Cable Requirements**

- **Power**
  - 18 AWG, 1 stranded twisted pair
- **RS-485**
  - 24 AWG, 120 ohm impedance, stranded twisted pair with shield, 4000 feet (1219 m) maximum
- **Inputs**
  - 1 stranded twisted pair per input, 30 ohms maximum
- **Outputs**
  - As required for the load
- **Reader Data (Wiegand, Clock and Data)**
  - 6 conductors, 18 AWG stranded, 500 feet (150 m) maximum
- **Reader Data (RS-485)**
  - 24 AWG, 120 ohm impedance, stranded twisted pair with shield, 4000 feet (1219 m) maximum