LECTUS secure readers (Wiegand)

www.boschsecurity.com

System overview

The LECTUS secure reader (Wiegand) family has three different form factors.

The mini mullion reader offers the most attractive pricing solution. The US Gang Box sized readers can be ordered with or without a keypad. The keypad functionality offers higher security due to possible multi-factor authentication.

The keypad functionality can also be used for a variety of access control features including the option to set a door to long-term open.

The LECTUS secure readers are fully compatible with the Bosch Access Management portfolio, including the Management Software Systems (BIS/ACE, AMS and APE), the Access Modular Controller (AMC2), and the MIFARE and iCLASS credential portfolio.

The support of 13.56MHZ credential formats offers a migration path for proximity installations.

The use of NFC on mobile phones to set up the communication with the readers enables mobile phones to be used as access credentials.

Certifications and approvals

<table>
<thead>
<tr>
<th>Region</th>
<th>Regulatory compliance/quality marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>KCC Korean Certification Mark</td>
</tr>
<tr>
<td>Europe</td>
<td>CE Declaration of Conformity</td>
</tr>
<tr>
<td>Global</td>
<td>RoHS</td>
</tr>
<tr>
<td>USA</td>
<td>UL 294 Certified</td>
</tr>
<tr>
<td></td>
<td>FCC FCC Compliance</td>
</tr>
</tbody>
</table>

Installation/configuration notes

The pigtail interface of the Wiegand readers is easy to install.

A variety of card data formats are supported based on the card technology, including 26bit, 32bit and 56-bit format.

The integrated audio sounder provides various tone sequences to alert: access granted, access denied, power up and diagnostics. Cardholders can easily distinguish between access granted and access denied. A high-intensity light bar provides a clear visual status indication in red, green or amber, even in bright sunlight.

- 13.56 MHz proximity compatible with access controllers with Wiegand interfaces
- IP55 rating allows for indoor and outdoor installations (additional gasket improves rating to IP65)
- Support of multiple card technologies (e.g. iCLASS SE, SEOS, MIFARE DESFire® EV1)
- Quick reading response for high performance level
- Easy and quick mounting for cost saving installation
The rugged polycarbonate enclosure is designed to withstand severe environmental conditions and provides reliable performance and resistance to vandalism. The IP class can be upgraded to IP65, with additional gaskets.

### Technical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Voltage Range</td>
<td>5 to 16 VDC (12 VDC for RS 485)</td>
</tr>
<tr>
<td>Current draw</td>
<td>60 to 220 mA (peak), 16V (see manual for details)</td>
</tr>
<tr>
<td>Cable distance</td>
<td>Up to 150 m</td>
</tr>
<tr>
<td>Environmental rating</td>
<td>IP 65 without gasket/IP55 with additional gasket</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-35 °C to 65 °C (-31 °F to 150 °F)</td>
</tr>
<tr>
<td>Humidity</td>
<td>5 to 95%, no condensation water</td>
</tr>
<tr>
<td>Cable distance</td>
<td>Up to 150 m</td>
</tr>
<tr>
<td>Housing Material</td>
<td>Polycarbonate (UL 94)</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Display</td>
<td>Multicolored RGB LED bar</td>
</tr>
<tr>
<td>Panel connection</td>
<td>Wiegand, pigtail</td>
</tr>
<tr>
<td>Card compatibility</td>
<td>iCLASS iCLASS SE SEOS ISO 14443A CSN MIFARE Classic 32bit (default) + NFC (Support of HID mobile access) + iCLASS (26 / 37 bit standard coding scheme) + HID Corporate-1000 (35 / 48 bit standard coding scheme) + iCLASS SE (26 / 37 bit SIO - Secure Identity Object) + iCLASS Sees (26 / 37 bit SIO - Secure Identity Object)</td>
</tr>
<tr>
<td>Operating frequency</td>
<td>13.56 MHz</td>
</tr>
</tbody>
</table>

Note: Using the Surface mount panel with the ARD-SER10-xx will:
- Reduce the environmental rating class to IP45, and
- Disable the tamper protection.

**Typical reading distance**

<table>
<thead>
<tr>
<th>LECTUS secure readers (Wiegand)</th>
<th>LECTUS secure 1000 W1</th>
<th>LECTUS secure 4000 W1</th>
<th>LECTUS secure 5000 W1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LECTUS secure 1000 W1</strong></td>
<td>7.6 cm (iCLASS SE card)</td>
<td>11.4 cm (iCLASS SE card)</td>
<td>12.7 cm (iCLASS SE card)</td>
</tr>
<tr>
<td><strong>LECTUS secure 4000 W1</strong></td>
<td>5.8 cm (MIFARE Classic card)</td>
<td>8.9 cm (MIFARE Classic card)</td>
<td>11.4 cm (MIFARE Classic card)</td>
</tr>
<tr>
<td><strong>LECTUS secure 5000 W1</strong></td>
<td>3.3 cm (iCLASS SE key fob)</td>
<td>4.6 cm (iCLASS SE key fob)</td>
<td>4.6 cm (iCLASS SE key fob)</td>
</tr>
<tr>
<td></td>
<td>1.3 cm (MIFARE Classic key fob)</td>
<td>3.8 cm (MIFARE Classic key fob)</td>
<td>3.8 cm (MIFARE Classic key fob)</td>
</tr>
</tbody>
</table>

Note: Typical read range achieved in air. Different types of metal will cause some degradation (typically up to 20%). Use spacers to space product off metal and improve read range if required.

**NOTE:** Using the Surface mount panel with the ARD-SER10-xx will:
- Reduce the environmental rating class to IP45, and
- Disable the tamper protection.

**NOTE:** HID listings for UL and FCC are valid for this product family. For details see www.hidglobal.com/certifications.
### Ordering information

**ARD-SER10-WI** Card reader, iCLASS, Wiegand
iCLASS/MIFARE reader, mini-mullion size, suited for mullion-mounted door installations, U.S. single-gang J-box or any flat surface, pigtail, 4.8 x 10.3 x 2.3 cm, 113g net
Order number **ARD-SER10-WI**

**EWE-RDR-IW** 12mths wrty ext. Access Control Reader
12 months warranty extension
Order number **EWE-RDR-IW**

**ARA-SER10-IP65** LECTUS Secure 1000 Gasket for IP65, 10pc
Gasket for protection class IP65, material Chloroprene Rubber, dimensions 4.625 x 10 x 0.2 cm, 10 pcs/each
Order number **ARA-SER10-IP65**

**ARD-SER40-WI** Card reader, iCLASS, Wiegand
iCLASS/MIFARE reader, wall switch size, designed to mount and cover single gang switch boxes primarily used in the Americas, slotted mounting plate for European and Asian back box spacing, pigtail, 8.4 x 12.2 x 2.4 cm, 220g net
Order number **ARD-SER40-WI**

**EWE-RDR-IW** 12mths wrty ext. Access Control Reader
12 months warranty extension
Order number **EWE-RDR-IW**

**ARA-SER40-IP65** LECTUS Secure 4000 Gasket for IP65, 10pc
Gasket for protection class IP65, material Chloroprene Rubber, dimensions 8.1 x 11.9 x 0.2 cm, 10 pcs/each
Order number **ARA-SER40-IP65**

**ARD-SER30-WI** LECTUS secure 3000 WI iCLASS reader
iCLASS/MIFARE reader, EU / APAC Square Size, square reader is designed to mount to and cover standard European and Asian back boxes, pigtail, 8.4 x 8.4 x 2.3 cm, 148g net
Order number **ARD-SER30-WI**

**ARD-SERK40-W1** Card reader with keypad, iCLASS, Wiegand
iCLASS/MIFARE reader, wall switch size, designed to mount and cover single gang switch boxes primarily used in the Americas, slotted mounting plate for European and Asian back box spacing, pigtail, keypad (4x3), 8.5 x 12.2 x 2.8 cm, 256g net
Order number **ARD-SERK40-W1**

**EWE-RDR-IW** 12mths wrty ext. Access Control Reader
12 months warranty extension
Order number **EWE-RDR-IW**

**ARA-SERK40-IP65** LECTUS Secure 5000 Gasket for IP65, 10pc
Gasket for protection class IP65, material Chloroprene Rubber, dimensions 8.1 x 11.9 x 0.2 cm, 10 pcs/each
Order number **ARA-SERK40-IP65**

### Accessories

**F01U508789** Surface mount panel, 10pcs
Surface-mount panel for LECTUS secure 1000 WI readers, 10 items/packaging unit
Order number **F01U508789**

**ARA-SER10-IP65** LECTUS Secure 1000 Gasket for IP65, 10pc
Gasket for protection class IP65, material Chloroprene Rubber, dimensions 4.625 x 10 x 0.2 cm, 10 pcs/each
Order number **ARA-SER10-IP65**

**ARA-SER40-IP65** LECTUS Secure 4000 Gasket for IP65, 10pc
Gasket for protection class IP65, material Chloroprene Rubber, dimensions 8.1 x 11.9 x 0.2 cm, 10 pcs/each
Order number **ARA-SER40-IP65**

**ARA-SERK40-IP65** LECTUS Secure 5000 Gasket for IP65, 10pc
Gasket for protection class IP65, material Chloroprene Rubber, dimensions 8.1 x 11.9 x 0.2 cm, 10 pcs/each
Order number **ARA-SERK40-IP65**

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