ID LRU500i

UHF Compact Reader

- UHF Long Range Reader with integrated antenna
- Circular-polarized antenna for any transponder orientation
- Antenna port for additional external antenna
- Up to 10 m read range
- Robust and compact housing for indoor and outdoor use (IP67)
- Integrated signal light (red/green)
- Secure Key Storage for application keys
- Fast and easy mounting and installation
- Up to 2 W ERP transmitting power

Compact reader for numerous logistical applications

The LRU500i is the optimal solution for installing RFID reading points in the incoming / outgoing goods area and along conveyor belts.

Thanks to its read range of up to 10 m, the compact reader with integrated antenna and signal light can be used in numerous applications as a “one device solution”. By connecting an additional, external antenna, gate and tunnel applications can also be implemented to generate larger reading fields.

Process monitoring using optical signal transmitters

The LRU500i is the optimal solution for installing RFID reading points in the incoming / outgoing goods area and along conveyor belts.

When reading the transponder, the integrated signal light of the reader gives feedback whether e.g. incoming goods are actually stored in the system as ordered products or whether components have the required manufacturing status when fed into the manufacturing process.
**UHF Compact Reader with integrated antenna and signal light**

Small and powerful UHF RAIN RFID Long Range Reader for numerous logistical applications.

<table>
<thead>
<tr>
<th><strong>Product Details</strong></th>
<th><strong>ID LRU500i</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mechanical Data</strong></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>Plastic (ASA-PC), Aluminium</td>
</tr>
<tr>
<td>Dimensions</td>
<td>290 mm x 290 mm x 100 mm (11.4 x 11.4 x 3.9 inch)</td>
</tr>
<tr>
<td>Weight</td>
<td>2.800 g</td>
</tr>
<tr>
<td>Mounting</td>
<td>VESA FDMI MIS-D 100 mm x 100 mm</td>
</tr>
<tr>
<td>Protection Class</td>
<td>IP 67</td>
</tr>
<tr>
<td>Colour</td>
<td>Anthracite, translucent</td>
</tr>
<tr>
<td><strong>Electrical Data</strong></td>
<td></td>
</tr>
<tr>
<td>Power Supply</td>
<td>12...24 V DC (+10%), PoE+</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>typical 16 W (22 W with PoE+)</td>
</tr>
</tbody>
</table>
| Operating Frequency | - Variant EU: 865 MHz up to 868 MHz  
- Variant FCC: 902 MHz up to 928 MHz |
| Output Power        | max. 2 W ERP  
- Radiated (int. antenna)  
- Conducted (ext. antenna) max. 1 W, configurable in steps of 100 mW |
| Antenna Connector   | 1x R-TNC-Jack (50 Ω)  
(Reverse-TNC) |
| RF-Diagnosis        | RF-channel monitoring, Antenna SWR control, Internal Overheating Protection |
| Outputs             | max. 24 V DC / 20 mA  
- 2 Optocoupler*  
- 2 Relays* max. 24 V DC / 1 A switching current, 2 A permanent current |
| Inputs              | max. 24 V DC / 20 mA  
- 2 Optocoupler |
| Interfaces          | Rs485, USB (On-The-Go), Wiegand  
- Variant PoE: Ethernet, USB (On-The-Go) |
| Protocol-Modes      | ISO Host Mode, Scan Mode, Notification Mode, Buffered Read Mode |
| **Features**        | Supported transponder types |
|                     | RAIN RFID  
EPC Class1 Gen2  
EPC Class1 Gen2 V2  
ISO 18000-6-C  
ISO 18000-63 |
| **Environmental Conditions** |                 |
| Temperature range   | - Operation -25° C up to 55° C  
- Storage -25° C up to 85° C |
| Humidity            | 5% to 95% (non-condensing) |
| Vibration           | EN 60068-2-6  
10 Hz to 150 Hz: 0,075 mm / 1g |
| Shock               | EN 60068-2-27  
Acceleration: 30 g |
| **Applicable Standards** |                 |
| Radio Regulation    | - Europe EN 302 208  
- USA FCC 47 CFR Part 15  
- Canada IC RSS-GEN, RSS-210  
- India BIS IS 13252 Part 1 |
| EMC                 | EN 301 489 |
| Safety              | - Low Voltage EN 62368  
- Human Exposure EN 50364 |
| Others              | RoHS, WEEE |

*Only applies to variant PoE. Variant BD offers no optocoupler output and only one relay output.*

Stand of information: June 2020. The information in this document is subject to change without notice and shall not be construed as a commitment. All brand names, trademarks or logos are property of their respective owners.