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.

Technical data

Dimensions (w x h x d)	290 mm x 290 mm x 100 mm
Weight	2,800 g
Housing	Plastic (ASA-PC), Aluminium
Color	anthracite, translucent
Protection class	IP67
Mounting	VESA FDMI MIS-D, 100 mm x 100 mm
Power supply	12 up to 24 V DC ±10 %, PoE+
Power consumption	typical 16 W (22 W with PoE+)
Operating frequency	
Variant EU	865 MHz up to 868 MHz
Variant FCC	902 MHz up to 928 MHz
Output power	
Radiated (int. antenna)	max. 2 W ERP
Conducted (ext. antenna)	max. 1 W, configurable in steps of 100 mW
Antenna connector	1x R-TNC-Jack (50 Ohm) (Reverse-TNC)
RF-Diagnosis	RF-channel monitoring, Antenna SWR control, Internal Overheating Protection
Outputs	
2 Optocoupler*	max. 24 V DC / 20 mA
2 Relays*	max. 24 V DC / 1 A switching current, 2 A permanent current
Inputs	
2 Optocoupler	max. 24 V DC / 20 mA
Interfaces	
Variant BD	RS485, USB (On-The-Go), Wiegand
Variant PoE	Ethernet, USB (On-The-Go)
Reader modes	ISO Host Mode, Scan Mode, Notification Mode, Buffered Read Mode
Supported transponders	RAIN RFID, EPC Class1 Gen2, EPC Class1 Gen2 V2, ISO 18000-6C, ISO 18000-63
Indicator	Signal light with red / green / blue, 10 LEDs to indicate operation and antenna state
Network services	TCP/IP, DHCP
Other features	Anti-Collision, Output of RSSI values and phase angle, Battery-assisted real-time clock, Supports encrypted transponder communication, Secure Key Storage, Config Cloning function
Temperature range	
Operation	-35 °C up to +55 °C**
Storage	-25 °C up to +85 °C
Humidity	5 % up to 95 % (non-condensing)
Vibration	EN 60068-2-6 10 Hz to 150 Hz: 0.075 mm / 1 g
Shock	EN 60068-2-27 Acceleration: 30 g

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

** Tested according to EN 60068-2-1; extended temperature range up to +70 °C on request

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Standard conformity

Radio license	
Europe, UK	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

FEIG

FEIG ELECTRONIC GmbH
35781 Weilburg, Germany, info@feig.de, www.feig.de

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