RDR LoRa RFID/NFC Reader

High performance, low power RFID reader/writer and NFC device with LoRa connectivity, integrated LEDs/buzzer, battery power and rugged, vibration proof enclosure for use cases in indoor and outdoor infrastructure and transport.

RDR is a robust, indoor/outdoor RFID reader/writer and NFC device that features the latest, very sensitive lowpower RFID reader technology and an integrated LoRaWAN LPWAN modem. The device can read and write to RFID cards and tags using 13.56MHz RF technology, as well as communicate with NFC tags and devices. Read data from cards or other tags is stored in an internal data buffer along with a timestamp. Data stored by a tag is transmitted over the standard LoRaWAN network. The small and robust device can be mounted on a wall or pole or used as a desktop device. RDR can be powered via USB with a suitable cable or via battery power with 4 AAA primary batteries or rechargeable batteries. This enables a wide range of applications in logistics, service on demand, supply chain and attendance monitoring.



Features

- 13.56MHz RFID Reader supports all ISO14443A/B Tags
- NFC Standards 13.56MHz (ISO 18092, ISO14443A/B, ISO15693, FeliCa[™], VHBR)
- Internal buffer for up to 50 readings
- Separate LED signalisation for read operation and LPWAN data transfer
- Beeper
- USB port for configuration, firmware update or power supply
- Size: 100x100x25mm
- Weight: 250g
- Batteries: 4x AAA primary or recharchable cells
- LoRaWAN V1.0.3, OTAA and ADR enabled
- Integrated 868MHz Antenna
- Confirmed / Unconfirmed Uplinks selectable
- Payload format and decoder examples available
- Optional Card Emulation and Peer2Peer functionality (please contact us)
- Developed and manufactured in Switzerland

Applications

- Logistics
- Reordering of consumables
- Contact tracing
- Consignment warehouses
- Railway parts tracking
- Electronic type plate
- Production item tracing
- Attendance tracking
- Time recording
- Service on Demand
- Service acknowledgement
- Delivery Service timestamping

Electrical Specifications

Spezifikation	Minimum	Nominal	Maximum	Unit
USB supply voltage	4.5	5	5.5	V
Battery supply voltage	4		6	V
Current soncumption (active)		65		mA
Current soncumption (LoRa TX)		100		mA
Current consumption (sleep)		TBD		uA

Mechanical Specifications

Spezifikation	Minimum	Nominal	Maximum	Unit
Weight		250		G
Size (LxWxH)		100x100x25		mm

Environmental Specifications

Spezifikation	Minimum	Nominal	Maximum	Unit
IP protection class (indoor versions)		40		IP
IP protection class (outdoor versions)		67		IP
Mechanical shock protection		TBD		
Humidity				RH
Operating temperature range	-30		+60	°C
Storage temperature range	-40		+85	°C

Ordering Information / Variants

Part Number	Status ¹	Region	Environment	Battery
RDR-EU868-B	Active	EU868	Indoor	4x AAA (LR03)
RDR-EU868-OD	New	EU868	Outdoor IP65 coated	4x AAA (LR03)

Product Lifecycle Status

1	New	This product is new and not yet in full production
Active Full production and no indication of EOL		Full production and no indication of EOL
	Not for new designs	Indication of EOL
	EOL	Product is at end of life, but can still be ordered until last time buy date
♦	Obsolete	Product cannot be ordered anymore (after last time buy date)

Mechanical Drawings





Bottom View Fixing Points and Cable Entry

Regulatory Information

EMC:	EN 301 489-1 V2.2.0 EN 301 489-3 V2.1.1
NFC:	EN 300 330 V2.1.1
Radiated RF:	EN 300 220-1 V3.1.1 + EN 300 220-2 V3.1.1
Safety:	EN 62368-1:2014 AC:2015 + A11:2017

Complete Solutions with low TCO

All Parametric systems are built to last, incorporating good quality components with a clean supply chain. By constantly monitoring the component availability and adapting the device to new conditions, the products are supported for a long time. This minimizes the operator's risk and guarantees operation with low total costs of ownership. All our products can be used and integrated without vendor lock-in. Alternatively, we also offer vertical solutions and specific adaptions in device firmware (up to complete OEM versions) of our products.

Support

We support our customers in integrating our products into their systems. Call us to get more information and tell us about your requirements.

Contact Information

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