



### UHF LONG RANGE READER WITH GPRS

The DLR-PR001 reader has been carefully designed according to customer requests and in-field experience from RFID installations. The result is a UHF long range reader with GPRS and outstanding RFID reading performance, computing power and communication capabilities.

The reader is optimized for portal installations, featuring full power to up to 4 antennas, Gen2 Dense Reader Mode management and high speed read rates.

### NO EXTERNAL PC OR CABLING REQUIRED

Based on an embedded hardware architecture (x86) and a standard Linux operating system, the Ion reader eases the development of custom software and solutions. The on-board computing power and connectivity eliminate the need for an external PC and related cabling. This results in deployment and operations cost savings, thus reducing the total cost of ownership of installed devices.

The Ion is best suited for complex AutoID scenarios, where data can be collected and fed directly to the reader from multiple sources such as smart card readers, bar code readers, GPS and other in-field sensors.

### USE IN ANY GLOBAL INSTALLATION

The inclusion of an optional integrated GPRS modem, together with its' compact and versatile form factor, allow the Ion reader to be used in any global installation requiring RFID usage in remote areas. As a result, the Ion allows solution providers to customize the reader to individual applications, thus creating their own specialized devices accordingly.



#### FEATURES

- EPC C1 G2, ISO 18000-6C Compliant
- Multi-Regional Support
- Embedded Intelligence
- Ethernet Port
- USB 2.0 High Speed Host Port
- Internal MicroSD slot
- Integrated GPRS modem (optional)
- Easily deployable & scalable

#### INDUSTRY-APPLICATIONS

- RFID tunnels
- Portal applications
- On vehicle installations
- Industrial control
- Access control systems
- Point of sales devices (smart shelves, smart displays)

## TECHNICAL SPECIFICATIONS

**CORDLESS COMMUNICATIONS**

ANTENNA CONNECTOR	4 TNC Reverse Polarity
FREQUENCY RANGE	902-928 MHz (FCC part 15); 865.600-867.600 (ETSI EN 302 208)
RF POWER	Up to 32 dBm (~1.6W) conducted
WIRELESS COMMUNICATIONS	GSM/GPRS (SMA) (optional); WiFi (optional via USB host)

**DECODING CAPABILITY**

EPC C1 G2, ISO 18000-6C COMPLIANT

**ELECTRICAL**

DC POWER	9-36 VDC(30W)
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**ENVIRONMENTAL**

PARTICULATE AND WATER SEALING	IP52
TEMPERATURE	-20 to 55 °C / -4 to 131 °F

**INTERFACES**

HOST INTERFACE PROTOCOLS	EPCglobal LLRP RFID host-to-reader protocol; CAEN RFID host-to-reader protocol
INTERNAL INTERFACES CONNECTIVITY	MicroSD slot; SIM card housing (optional) RS-232 Serial Communication (DB9); USB 2.0 High Speed Host Port; Ethernet 10/100BASE-T (RJ45)

**PHYSICAL CHARACTERISTICS**

DIMENSIONS	27.5 x 15.5 x 3.9 cm <sup>3</sup> / 10.8 x 6.1 x 1.5 in <sup>3</sup>
WEIGHT	1,300 g / 45.8 oz
DIGITAL I/O	13 GPIO pins, TTL level

**READING PERFORMANCE**

CPU	Intel Atom Z510 CPU @ 1.1Ghz
MEMORY	512 Mbytes RAM, 512 Mbytes SSD, 2Gbytes MicroSD
OPERATING SYSTEM SCRIPTING	Linux (Debian) Python 2.5 language interpreter; Java Virtual Machine
RECEIVING CAPABILITY	Gen 2 Dense Reader Mode Management; Data rate up to 400 Kbits/s
MTBF	135,000 hours

**SAFETY & REGULATORY**

STANDARD COMPLIANCE	EPC C1 G2/ISO 18000-6C
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**UTILITIES**

SM@RTSET-RFID SOFTWARE TOOL

**WARRANTY**

WARRANTY	2-Year Factory Warranty
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## ACCESSORIES

**Miscellaneous**

■ AN-DLR-PR002 RFID Antenna for DLR-PR001



■ IF-DLR-PR002 Interface Board for I/O