



# UHF RFID Compact Reader

## 865 – 868 MHz, 902 – 928 MHz

**RFI21.1**

### Features

- Multiregional Reader for ETSI, FCC Regions
- Multiprotocol Reader:
- iP-X
- EPC Class 1 Gen 2
- ISO18000-6 A, B
- DRM
- 1 Antenna SMA Port
- Up to 25 dBm Output Power
- ASK, PR-ASK Modulation
- UART and USB 2.0 Interface, GPIO
- Substantial Metal Box
- Small Dimensions 115 × 85 × 16 mm
- Low Cost

### Item Picture



### Description

RFI21 is RFID UHF compact multiprotocol reader for identification of UHF transponders in fields of application like logistics, industry, retail, transportation etc.

### Technical Data

Housing	Coated stainless steel, aluminium
Dimensions (W × H × D)	115 × 85 × 16 mm
Weight	200 g
Protection Class	IP30
Power Supply	5 V DC ±10%
Current Consumption	Idle Mode 120 mA Scan Mode: 750 mA @ 25 dBm, 510 mA @ 17 dBm
Operating Frequency	865 – 868 MHz for ETSI regions, 902 – 928 MHz for FCC regions
Transmitting Power	17 – 25 dBm adjustable
Modulation	PR-ASK, ASK
Transponder Communication Rates	Forward link 16 – 160 kbps (FCC reg.), 16 – 40 kbps (ETSI reg.) Return link 32 – 640 kbps (FCC reg.), 32 – 320 kbps (ETSI reg.)
Receiving sensitivity	-63 dBm
Antenna Connection	1 × 50 Ω SMA female connector, VSWR 1.5:1 or lower for best performance
RF Diagnostic	Antenna port SWR control, internal overheating control
Interface	3.3 V UART, USB 2.0 micro-B connector, GPIO, Metra open protocol, firmware bootloader
Supported Transponders	iP-X EM4122, EM4444, ISO 18000-6 A, B, EPC Class 1 Gen 2, anticollision support
Indicators	2 LED (power, operating status)
Temperature Range	Operating -20°C to +55°C, storage -20°C to +85°C
Relative Humidity	5 – 90% not condensing
Compliance	EN 302 208-1,2 V.1.3.1, EN 301 489-1,3,5, EN 55022, EN 60950, EN 60068-2-6, 27, 31, IEC 68-2-32, EN 60529, EN 60950-1, FCC 15.247