



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

RFI21.1 is an 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 -5 %/+10 %
Current Consumption	Idle Mode: <100 mA Scan Mode: 850 mA @ 25 dBm, 550 mA @ 17 dBm typical
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 (RFI21.1 EU version for ETSI regions only)	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