



R1270

500mW UHF RFID Ultra Compact Module



The world's **smallest**
OEM reader

General Info

The Quark-Up (Model R1270), OEM reader of the easy2read[®] Family, is an UHF multiregional ultra compact reader for low-power, high performances UHF RFID applications.

With programmable output power in 18 steps from 10dBm to 27dBm, the reader can detect tags at more than 3 mt of distance (depending on antenna and tag dimensions).

Due to its low power consumption, the module is specifically designed to be easily integrated in battery powered devices.

The radio frequency core of the module permits to achieve fast reading and to be used in dense reader and dense tag environments for top-class rated performances.

The compactness of the device and the board-to-board connector allow to embed the R1270 inside the new small form factor industrial handhelds, smartphone accessories and other compact form factor devices.

The R1270 complies with and can operate in both European and US regulatory environments and due to its multiregional capabilities, it's ideal for integration in devices requiring compliance to different geographical regions.

Features

- Multi-Regional Support
- EPC C1G2, ISO 18000-6C Compliant
- Ultra Compact Size
- UART Serial Port and USB Interface
- SW programmable output power up to 500mW (27dBm) conducted
- Low Power Consumption

Applications

- Handheld Devices
- Multiregional Label Printers and Applicators
- Point of Sales Devices
- Voice Operated Gloves



easy2read® Family

The easy2read® family constitutes a complete and reliable product line of readers for any Auto-ID need. A reading range from a few centimetres up to 7-8 metres distance makes the easy2read® family suitable for applications such as access control, UHF gates, desktop reading or OEM modules for integration into handheld or printer devices.

- OEM Readers
- Fixed Readers
- Desktop Readers

easy2read®

Technical Specifications Table

Frequency Range	902÷928 MHz (FCC part 15) 865.600÷867.600 MHz (ETSI EN 302 208)
RF Power	Programmable in 18 levels (1 dB step) from 10 dBm to 27 dBm (from 10 mW to 500 mW) conducted
Output Power Accuracy	± 1dB
Antenna Connector	Nr. 1 U.FL type
Frequency Tolerance	±10 ppm over the entire temp. range
Number of Channels	4 channels (compliant to ETSI EN 302 208 v1.3.1) 50 hopping channels (compliant to FCC part 15.247)
Std. compliance	EPC C1 G2/ISO 18000-6C
Digital I/O	4 I/O lines (3.3 V level; Iout=3 mA max)
Connectivity	USB interface: One USB 2.0 Full Speed (12 Mbit/s) device port UART Serial Port: Baudrate: up to 115200 Databits: 8 Stopbits: 1 Parity: none Flow control: none 3.3 V I/O voltage level
Dimensions	(W)25 x (L)25 x (H)6 mm ³ (1.0 x 1.0 x 0.2 inch ³)
Power Consumption	- 2.7W @ RF out = 27 dBm - 1.6 W @ RF out = 23 dBm - 0.15 W in idle mode
DC Power	5.0VDC +/- 5%
Operating Temp.	-10 °C to +55 °C
Weight	5 g

Ordering Options

Code	Description
WR1270CXAAA	R1270C - Ultra Compact Embedded UHF RFID Reader



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