



R1250I

Tile

Compact Desktop
RAIN RFID Reader



BENEFITS	Compact size	Cost effective	USB	HID
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Features

- RAIN RFID (UHF EPC Class1 Gen2, ISO 18000-63) compliant
- USB power and communication
- HID profile on USB available
- Integrated circular polarized antenna
- Compact form factor

Applications

- Points of sale
- Access control
- Tag Programming Stations
- Document tracking
- Inventory Management

Overview

The **Tile** (model R1250I), desktop reader of the easy2read® product line, is a RAIN RFID reader with integrated antenna for short to medium range applications.

The reader is powered and controlled directly by an USB cable, thus allowing to read RAIN RFID tags in an easy desktop environment.

Thanks to its compact size, the **Tile** reader is the perfect choice for various applications such as points-of-sale, document tracking, tag programming stations, access control and so on. It can also be used as a building block for smart shelves and smart displays.

The **Tile** reader supports the HID profile (native keyboard emulation) allowing to interact directly with legacy applications, office automation SW or any other generic solution requiring manual input.

Being compliant with both European and US regulatory environments, the Tile reader allows installations in various countries worldwide as needed by retailers, forwarders, warehouses and other global organizations.

The core components of the Tile reader are the CAEN RFID **QuarkUp** module, a top performing ultra-compact RAIN RFID module, and the **Quad**, a compact circular polarized antenna designed by CAEN RFID.



Technical Specification Table

Frequency Range	<ul style="list-style-type: none"> • 865.600÷867.600 MHz (ETSI EN 302 208 v. 3.1.1) (Mod. R1250IE, R1251IENF) • 902÷928 MHz (FCC part 15.247) (Mod. R1250IU, R1251IUNF)
Frequency Tolerance	±10 ppm over the entire temperature range
RF Power	<ul style="list-style-type: none"> • Configurable in 18 levels from 8 dBm ERP to 25 dBm ERP (Mod. R1250IE) • Configurable in 18 levels from 8.5 dBm EIRP to 25.5 dBm EIRP (Mod. R1250IU) • Configurable in 18 levels from 0 dBm ERP to 17 dBm ERP (Mod. R1250IENF, R1251IUNF)
Output Power Accuracy	± 1 dB
Number of Channels	<ul style="list-style-type: none"> • 4 channels (compliant to ETSI EN 302 208 v. 3.1.1) (Mod. R1250IE) • 50 hopping channels (compliant to FCC part 15.247) (Mod. R1250IU)
Standard Compliance	EPC Class 1 Gen 2 - ISO18000-63
Internal Antenna Gain	<ul style="list-style-type: none"> • 0.2 dBi (typical) (Mod. R1250IE) • 0.7 dBi (typical) (Mod. R1250IU)
Antenna	<ul style="list-style-type: none"> • Integrated Circular Polarized Antenna (Mod. R1250IE, R1250IU) • Integrated UHF Near Field Antenna (Mod. R1251IENF, R1251IUNF)
Connectivity	<ul style="list-style-type: none"> • Mini USB type B plug connector • USB 2.0 Full Speed (12 Mbit/s) device port • Must be connected to two High-Power USB Type A ports (500 mA @ VBUS) • HID profile available • Virtual COM Port parameters: <ul style="list-style-type: none"> • Baudrate up to 115.200 kbit/s • Databits: 8 • Stopbit: 1 • Parity: none • Flow control: none
User Interface	<ul style="list-style-type: none"> • Red LED: Power • Blinking Green LED: Tag Detection
USB Cable Length	<ul style="list-style-type: none"> • 1 m (Mod. R1250IE, R1250IU) • 1.8 m (Mod. R1251IENF, R1251IUNF)
Power Supply	<ul style="list-style-type: none"> • 5 V ± 5% - DC bus powered (USB) • Max. 650 mA
Dimensions	<ul style="list-style-type: none"> • (W)125 x (L)125 x (H)25 mm³ • 4.92 x 4.92 x 0.98 inches³
Operating Temperature	-10 °C to +55 °C
Weight	<ul style="list-style-type: none"> • 220 g max. (Mod. R1250IE, R1250IU) • 200 g max. (Mod. R1251IENF, R1251IUNF)

Ordering Options

WR1250IEXBAA	Tile - ETSI version - Black	WR1251IENFBA	Tile - ETSI version - Black - Near Field
WR1250IEXBFL	Tile - ETSI version - Grey - Flanged	WR1251IUNFBA	Tile - FCC version - Black - Near Field
WR1250IUXBAA	Tile - FCC version - Black		
WR1250IUXBFL	Tile - FCC version - Grey - Flanged		

