# ®CAENRFID

R1290I

# Hex

## Multipurpose
## RAIN RFID Reader with PoE



| BENEFITS | Display & Keypad | Customizable with Java code | Web Config. Interface | PoE | HID | USB Host & Device |
|----------|------------------|-----------------------------|-----------------------|-----|-----|-------------------|

## Features

- *RAIN RFID (UHF EPC Class1 Gen2, ISO 18000-63) compliant*
- *USB and Ethernet communication*
- *HID profile on USB available*
- *Integrated circular polarized antenna and external antenna connector*
- *Versatile form factor*
- *PoE or external power supply*
- *USB host port*
- *OLED display and keypad*
- *Internal scripting engine*

## Applications

- *Points of sale*
- *Encoding stations*
- *Access control*
- *Document tracking*
- *Inventory Management*

## Overview

The **Hex** (Model R1290IE, R1290IU), multipurpose reader of the easy2read© product line, is a RAIN RFID reader with integrated circular polarized antenna for short to medium range applications.
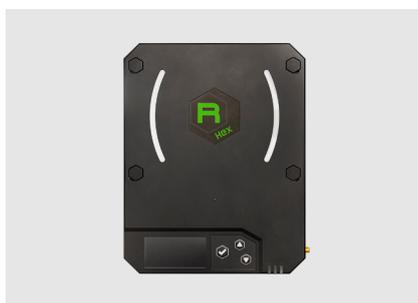
Thanks to its versatile form factor, the **Hex** is well suited for both desktop/counter top applications and for fixed reading point installations. It offers the Ethernet (PoE) and USB communication interface in order to simplify the installation both on large and single installations. The PoE capability permits to provide power and to communicate with the reader with a single cable when the PoE infrastructure is available.

In addition to the internal circular polarized antenna, the **Hex** provides a connector for an external antenna in order to extend the reading area of the reader and a set of GPIO lines that permits to control external devices like lights or alarms or to get triggers via external sensors (buttons, light barriers).

The USB host port, combined with the internal computing architecture, permits to connect USB peripherals like barcode scanners, keyboards, printers and many other devices transforming the **Hex** reader in a powerful and versatile identification platform.

The reader has an easy to use display and keypad interface for local configuration; the behavior of the keypad and display can be customized under customer specifications.

The **Hex** is available both for ETSI and FCC regions allowing installations in various countries worldwide as needed by retailers, forwarders, warehouses and other global organizations.

# Technical Specification Table

| | |
|---|---|
| **Frequency Range** | • 865.600÷867.600 MHz (ETSI EN 302 208 v. 3.1.1) (Mod. R1290IE)<br>• 902÷928 MHz (FCC part 15.247) (Mod. R1290IU) |
| **RF Power** | • Configurable in 18 levels from 8 dBm ERP to 25 dBm ERP (Mod. R1290IE)<br>• Configurable in 18 levels from 8.5 dBm EIRP to 25.5 dBm EIRP (Mod. R1290IU) |
| **Number of Channels** | • 4 channels (compliant to ETSI EN 302 208 v. 3.1.1) (Mod. R1290IE)<br>• 50 hopping channels (compliant to FCC part 15.247) (Mod. R1290IU) |
| **Standard Compliance** | EPC Class 1 Gen 2 - ISO18000-63 |
| **Internal Antenna Gain** | • 0.2 dBi (typical) (Mod. R1290IE)<br>• 0.7 dBi (typical) (Mod. R1290IU) |
| **Antenna Polarization** | Integrated Circular Polarized Antenna |
| **USB device Interface** | • USB 2.0 Hi-Speed (480 Mbit/s) device port<br>• Virtual COM Port parameters:<br>  • Baudrate up to 921.600 kbit/s<br>  • Databits: 8<br>  • Stopbit: 1<br>  • Parity: none<br>  • Flow control: none |
| **USB Host Interface** | • USB 2.0 High Speed Host Port<br>• Max. 500 mA output current |
| **Ethernet Interface** | • Ethernet 10/100/1000 Base-T (RJ45)<br>• PoE standard IEEE 802.3af |
| **User Interface** | • Button √: Confirm/Trigger or other functions controlled by firmware<br>• Up arrow: scroll up or other functions controlled by firmware<br>• Down arrow: scroll down or other functions controlled by firmware<br>• Power indication LED<br>• Radiofrequency activity LED<br>• Tag identification LED<br>• Tag identification lights<br>• Bitonal buzzer for event signaling<br>• Proximity sensor trigger<br>• OLED display 2.42" monochromatic (white on black) |
| **I/O interface** | • Push in PCB terminals<br>  • 1 digital input (from 4V DC to 48V DC range)<br>  • 1 solid state photorelay output (60V DC max; 500 mA max) |
| **Power Supply** | • 5 V ± 5% - DC power supply (10 W)<br>• PoE standard IEEE 802.3af (12.95 W) |
| **IP Rating** | IP30 |
| **Dimensions** | • (W)220 x (L)170 x (H)25 mm³<br>• 8.66 x 6.69 x 0.98 inches³ |
| **Operating Temp.** | -10 °C to +55 °C |
| **Weight** | 475 g |

# Ordering Options

| | |
|---|---|
| **WR1290IEXAAA** | Hex - ETSI version |
| **WR1290IUXAAA** | Hex - FCC version |
| | |
| | |
| | |
| | |