

## MIFARE® DESFire version now available with RS485 & USB

### ► HF | NFC Embedded Reader – R835



Our versatile **RFID HF | NFC Embedded Reader – R835 MIFARE® DESFire version** supports now the **interfaces RS485 and USB (+HID)**. iDTRONIC's **HF | NFC Embedded Reader R835 series** is a high-performance and low-cost **OEM RFID Reader series** for the integration into **vending machines, medical diagnostic devices** or **EV mobility chargers**. The microcontroller and the latest RF transceiver technology enables the user to read and write **13.56 MHz** RFID transponders of ISO standard **ISO 14443A/B and ISO 15693**. The RFID module R835 supports **MIFARE® Classic Mini/**

**1K /4K, Ultralight, Ultralight C, Ultralight Nano, DESFire EV1, DESFire Light, Smart MX, Plus S / X, Pro X, NTAG 21x, NTAG 424** as well as **EMxxx** or **I-Code SLI/SLIX/DNA** tags and transponder technologies.

### ► Industrial interface options for a variety of applications

The **RS485 interface** serves as a standard for industrial devices in companies or medical diagnostic systems. The RFID module can be easily integrated and installed in existing housings. The transmission of the **RS485 MODBUS** interface is fast and secure to the host system.

The **universal USB interface** is ideally suited for connections in vending machines or industrial self-service terminals for work equipment. The optional HID version validly reads serial number formats, membership number, names and other data. The memory areas support different file formats like **HEX (MSB), DEC (MSB), HEX (LSB), DEC (LSB) or ASCII** and can be defined as often as required. Thus, each RFID transponder receives unique user data.

► Application Example: EV Mobility Chargers



RFID is one of the essential technologies for publicly accessible charging infrastructure. Operators can use it to **control charging approval and payment processes and ensure that only authorized persons use the charging station** or that charging processes are billed according to the defined conditions. For charging stations in rented or company buildings, charging approval can be useful if the operator wants to ensure that only authorized persons use the charging facility.

With the integration of a suitable RFID OEM reader, such as the **RFID HF | NFC Embedded Reader - R835** and the use of compatible RFID transponders such as charging cards or keyfobs, operators gain complete control and transparency over the usage of their charging points. Compatible for Windows, it includes a choice of interfaces: **TTL, RS485, USB, USB HID or PC/SC** and an integrated U.FL antenna.

It is also available with an external antenna if required. In addition, a customized design is possible.

Once the charging station is equipped with an appropriate reader, RFID charging cards or keyfobs can serve as a practical and comparatively inexpensive identification medium for charging and payment transactions. In addition, consumption and turnover statistics as well as the entire charging history can be retrieved on request. This gives operators full transparency over the charged electricity.

The **charging cards and keyfobs of iDTRONIC** are technically optimized for use at charging stations. The common chip technologies with **13.56 MHz** are recommended, e.g. **NXP MIFARE® Classic 1k (4 byte/ 7 byte UID) and NXP NTAG (213 /215 / 216)**. Many other chip types are available on request. In addition to high-quality **CMYK offset printing with a desired design**, the charging cards and keyfobs can be provided with a **chic laser engraving** and thus equipped with serial numbers, for example.

► Including Configuration Tool and Demo Software

The **RFID HF | NFC Embedded Reader R835** comes with a **configuration tool** for Windows systems. It supports the **programming languages: C++ and binary command protocol**. Using the ConfigTool simplifies and facilitates the connection to your existing systems. Additionally we offer demo videos.

**Link to Configuration Tool:**



You need a custom firmware for your application?

iDTRONIC offers customer specific adaptations to the firmware on request.

More Information about our OEM RFID Reader

Product Site: [RFID HF | NFC Embedded Reader - R835](#)

Order Codes:

TTL Version: **OEM-DES-R835-TTL**

RS485 Version: **OEM-DES-R835-RS485**

USB Version: **OEM-DES-R835-USB** | USB HID Version: **OEM-DES-R835-USB-HID**

PC/SC Version: **OEM-DES-R835-PCSC**

► Would you like to learn more about our OEM RFID Reader?

PRODUCT REQUESTS



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