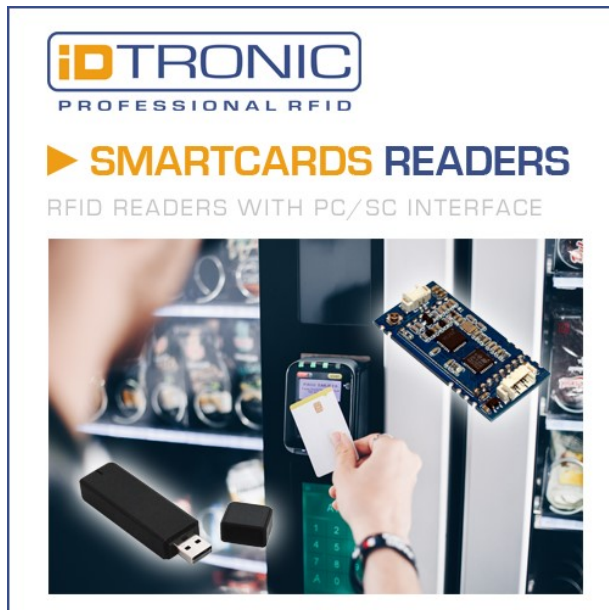


Ludwigshafen, 25 November 2020

## PC/SC Function for Smartcards Terminals

### RFID Readers and RFID Modules for the identification of smartcards



The **PC/SC** interface is a flexible connection between a smartcard reader and a computer. **PC/SC** is derived from the terms "personal computer" and "smart card". The interface enables the reading of smartcards in a PC environment. **PC/SC** standard is platform and manufacturer independent and can therefore be integrated into any operating system. Possible smartcards are customer cards, employee ID cards, health insurance cards, NFC-based EC or credit cards.

### ► RFID STICK READER **EVO HF**

**RFID Reader Stick EVO HF** is a mobile hardware solution for smartcard identification. The USB stick format and the **plug-and-play function** make it easy and quick to integrate into any device with USB 2.0 connection. Integrated RFID HF frequency with 13.56 MHz supports **ISO 14443A/B, ISO 15693, ISO 18000-3 and all NXP MIFARE® and DESFire® transponders**. The **integrated antenna** of the **RFID USB reader** reads all smartcard in near field environments of up to 4 cm. An **integrated LED signal shows the successful tag communication**.



### ► Application Example: **PC-Log-On in Industrial IoT Areas**



**RFID Reader Stick EVO HF** is an optimal solution for the **identification of staff at several workstations**. The smartcards have a unique UID stored on the chip and are specially activated for an employee of the company. RFID reader validly reads all data stored on the chip thanks to the integrated PC/SC functionality. The advantage of this technology is the traceability of document

changes, secures authentication against unauthorised access, and protects the viewing and editing of confidential documents.

### ► RFID MODULE **M890 DESFire**



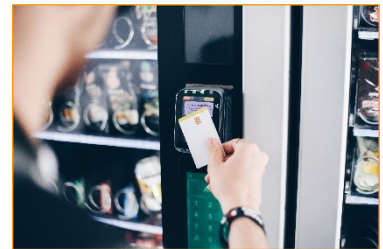
#### Product Info

**RFID Module M890 DESFire** is an **embeddable OEM solution**, which makes it possible to read smartcards with existing devices. The **one-sided laying components** of the RFID module allow for embedding in various devices. **13.56 MHz frequency** supports the RFID standards **ISO 14443A/B (T=CL), ISO 14443-4, ISO 15693, ISO 18092 / ECMA-340 (NFC) and ISO 18000-3**. Depending on the transponder type and antenna, the RFID module achieves **reading ranges of up**

**to 8 cm**. The **RFID Module M890 DESFire** consumes less than 1 mA in low power mode.

### ► Application Example: **Vending Machines with Payment Function**

**RFID Module M890 DESFire** is a RFID OEM solution for the **integration in vending machines**. The **PC/SC functionality** enables the identification of smartcards with integrated chip. **RFID HF reader** validly reads the integrated **NFC chip** on the smartcard. This enables payment processing - either by credit or EC function. The advantage is the complete handling of the sales process with one card.



### ► Including **Software Development Kit**

The **RFID products** are supplied with a software development kit for Windows systems. This supports the programming languages: C++ and binary command protocol.

#### The SDK includes:

- Hardware Descriptions
- Demo Software
- Specifications and Dimensions
- REACH, ROHs, RED, FCC Certificates
- Installation Instructions

Using the SDK simplifies the connection to your existing systems.

► **RFID Stick Reader EVO HF:** [Download](#)

► **RFID Module M890 DESFire:** [Download](#)

## ► iDTRONIC'S SERVICE FEATURES



Let us know your demanding requirements for Auto-ID/RFID products. We have set ourselves the goal of breaking through the limits of today's technologies and setting new standards. We are ready to work with you to develop the right hardware for your application and product idea. Together with you we implement your individual requirements in the shortest possible time.

Our expertise in IIoT / RFID will help you bridge the gap between an idea and a visionary product. Besides the modification of existing hardware and software products, we are also prepared to offer you completely new developments.

### **Our core competencies are:**

- Hardware modifications and developments
- Antenna designs for on and off metal applications
- Robust designs for dedicated application environments
- Firmware modifications and developments

---

## CONTACT US IF YOU HAVE QUESTIONS ABOUT OUR PRODUCT PORTFOLIO



### **Contact Person for Product Requests**

**Mr Patrick Kochendörfer**  
Senior Product Manager  
– Professional RFID –

Tel.: +49 621 66900 94 – 21

E-mail: [patrick.kochendoerfer@idtronic.de](mailto:patrick.kochendoerfer@idtronic.de)



### **Contact Person for Media Requests**

**Ms Maria Mahler**  
Marketing Manager  
– Professional RFID –

Tel.: +49 621 66900 94 – 11

E-mail: [maria.mahler@idtronic.de](mailto:maria.mahler@idtronic.de)