

HF | NFC STICK READER EVO



PRODUCT DESCRIPTION

The HF | NFC Stick Reader EVO is a modern and slight plug-and-play RFID read and write device with integrated HID and VCP mode and USB 2.0 interface. It is the perfect RFID reader for latest IoT applications in companies and really suitable for a wide variety of applications in ecommerce, telecom, postal, banking or health care.

This new versatile RFID reader supports two modes of operation via USB: a virtual comport (VCP) or a Human Interface Device (HID).

The VCP mode has a complete read and write access. It is designed for IoT applications and can be easily integrated into any operating system.

The HID mode is a keyboard emulation mode. Beside different UID (Serial Numbers) formats, the reader can be set to read out different parts of the user memory as well. The HID mode is perfectly suited for web applications in heterogeneous IT cloud environments.

HF | NFC Stick Reader EVO supports ISO Standard ISO/IEC 14443A/B, ISO 15693 and ISO 18000-3M3. It reads transponder and tags with MIFARE® Classic, MIFARE® DESFire, NTAG, EMxxxx and I-Code ILT-M chip.

The HF | NFC Stick Reader EVO is certified according to RoHS 2 and REACH. It is supplied with a software development kit for Windows systems. This supports the programming languages: Binary command protocol, VS2005 C++ Library. With the help of our demo software introduction, the SDK simplifies the connection to your existing systems.

► APPLICATIONS

- E-Banking | E-Shopping
- Internet Security
- Software Lock
- Telecom & Postal
- E-Wallet Charging & Check

► FEATURES

- HID + VCP Mode
- USB 2.0 Interface
- Integrated Antenna
- Read & Write Mode
- LED and Buzzer Signal
- USB Plug & Play Mode

► RFID OPTIONS

- ISO 14443A/B
- ISO 15693
- ISO 18000-3M3)

TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
Power Supply	USB VCP + HID
Power Consumption	<200 mA
Operating Frequencies	HF NFC: 13.56 MHz
Operating Distances	3 cm*
Standard UID Output	HF: ISO 14443A UID LSB
Antenna	integrated
Status	1x Bi-color LED 1x Buzzer
Interfaces	USB 2.0 (Plug-and-play)
MECHANICAL SPECIFICATIONS	
Dimensions	75 × 20 × 10 mm
Weight	15 g
Housing	ABS (white)
ENVIRONMENTAL CONDITIONS	
Operating Temperature	-20 °C ... +70 °C
Storage Temperature	-20 °C ... +80 °C
Humidity	up to 95%, non condensing
SDK INFORMATION	
Supported OS	Windows XP, Vista, 7, 8, 8.1, 10
Supported Languages	Binary command protocol, VS2005 C++
Demo Software	Windows

SUPPORTED STANDARDS TAGS	
RFID HF NFC: 13.56 MHz	
ISO 14443 A and compatible	Read/write: MIFARE® Classic/1K/4K, MIFARE Ultralight®/C, MIFARE® DESFire®EV1/2, MIFARE® Smart MX, MIFARE® Plus S / X, MIFARE® Pro X, NTAG 21x, Read UID only of all other ISO14443A RFID tags
ISO 14443 B and compatible	SRI4K, SRIX4K, AT88RF020, 66CL160S, SR176
ISO 15693 and compatible	EM4135, EM4043, EM4x33, EM4x35, I-Code SLI / SLIX, M24LR16/64, TI Tag-it HF-I, SRF55Vxx (my-d vicinity)
ISO 18000-3M3	I-Code ILT-M
APPLICABLE STANDARDS	
EMC	EN 301489-1:2019-11 (v2.2.3) EN 301489-3:2019-03 (V2.1.1)
Radio Regulation	EN 300330-1:2015-03 (V1.8.1) EN 300330-2:2015-03 (V1.6.1)
Safety	EC 62368-1:2018-10 (V3.0, valid as of 2020-12-20)
RoHS 2	EC Guideline 2011/65/EU and amendment 2015/863/EU, updated by 2017/2102/EU EN 50581:2012 (valid till 2024-07-07) EN 63000:2018
REACH	EU Guideline 1907/2006, updated by 2020/171/EU
Certificates	FCC, CE

*Reading distance depends on tag and environmental conditions

SOFTWARE SETTINGS TO CONFIGURE OUTPUT FORMAT

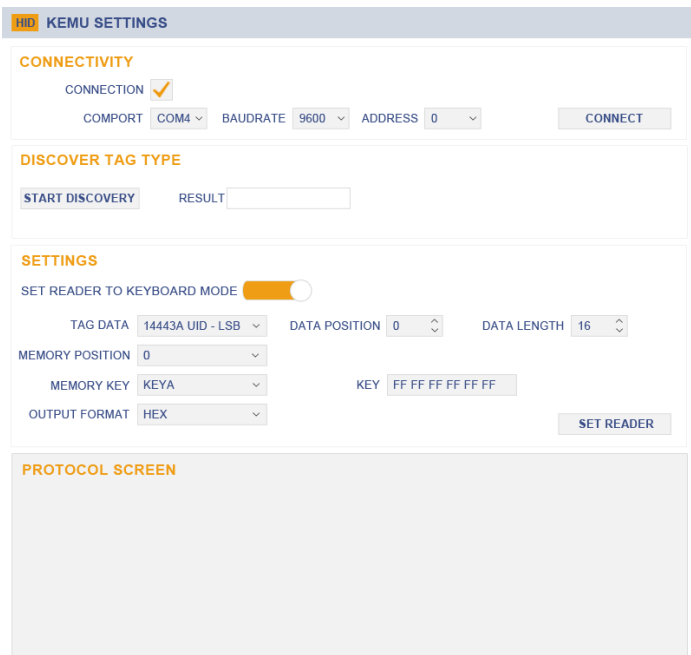
Operating Modes:

There are two working modes available on the Stick Reader EVO NFC:

HID Mode = Keyboard emulation (Read Only)

VCP Mode = Virtual ComPort (Read & Write)

With the HID mode, that the device automatically retrieves the data from the transponders as keyboard emulation. The output can be configured from various ways. Beside different UID (Serial Numbers) formats, the reader may be set to read out different parts of the user memory in various formats. The configuration can be done via a configuration tool which is compatible with Windows OS.



The screenshot shows the 'HID KEMU SETTINGS' window. It is divided into four sections:

- CONNECTIVITY:** Includes a 'CONNECTION' checkbox (checked), a 'COMPORT' dropdown set to 'COM4', a 'BAUDRATE' dropdown set to '9600', an 'ADDRESS' dropdown set to '0', and a 'CONNECT' button.
- DISCOVER TAG TYPE:** Includes a 'START DISCOVERY' button and a 'RESULT' text input field.
- SETTINGS:** Includes a 'SET READER TO KEYBOARD MODE' toggle switch (turned on), a 'TAG DATA' dropdown set to '14443A UID - LSB', a 'DATA POSITION' spinner set to '0', a 'DATA LENGTH' spinner set to '16', a 'MEMORY POSITION' dropdown set to '0', a 'MEMORY KEY' dropdown set to 'KEYA', a 'KEY' text input field containing 'FF FF FF FF FF FF', and an 'OUTPUT FORMAT' dropdown set to 'HEX'. A 'SET READER' button is located at the bottom right of this section.
- PROTOCOL SCREEN:** A large empty grey area at the bottom of the window.

The VCP mode offers fully read and write access to all supported transponder types. The device can be operated via demo software, sample source codes, and a USB driver on Windows OS. Other operating systems are supported via a serial command protocol and a virtual ComPort interface based on a CH340E chip.

ORDER CODES

VERSIONS	ORDER CODES
HF NFC Stick Reader EVO	R-STICK-EVO-NFC