



HF Reader Series STICK READER EVO

APPLICATIONS

- Reading of ID and Member Cards
- · Access logging Systems
- $\cdot\,$ R/W of Transponder at PC
- NFC & Mobile Application
- · PC Log-on; Online Payment

FEATURES

- · Integrated Antenna
- · Reading Range up to 4 cm
- · USB VCP, USB HID, PC/SC
- · LED Signal
- SDK and Windows based application are supplied

RFID OPTIONS

- · ISO 14443 A/B
- · ISO 15693
- · ISO 18092 | ECMA-340 (NFC)
- · ISO 18000-3

DESCRIPTION

The Stick Reader EVO HF Series are sleek and compact RFID read / write devices with an integrated antenna. The Stick Reader EVO HF series supports all common HF standards such as ISO 14443 A/B + ISO 15693 tags (including ISO 18000-3) and ISO 18092.

Equipped with an USB interface, it is available as read/write (COM-Port) version, as HID (keyboard emulation) version or as PC/SC version.

The read/write version allows you full access to the transponders memory and let you decode / encode the memory.

The HID (keyboard emulation) version provides the output of the UID number through the USB interface in the standard version. On project base it is possible to modify this output according to the customer request.

EVO Stick Reader allows reading ranges of up to 4 centimeters, depending on tag type and orientation. Its compact design and LED signal distinguish the EVO from other RFID readers.

iDTRONIC's hardware comes with a useful SDK for the development of controller, Linux, Android or Windows based applications. Beside the documentation, command protocols and source codes, the SDK includes a Windows based demo application with full functionality over all supported HF RFID standards.

APPLICATION EXAMPLE

ACCESS CONTROL AT LIBRARIES



Access controls are widespread nowadays. Especially in libraries a desktop reader system is used for identification of a person.

The reception can use the Stick Reader EVO HF and connect it via the USB interface of the computer. The members of a library get a user card for the access.

When a member is coming to the counter, the employee can scan the card on the Stick Reader with a reading of up to 4 cm. The reader reads the data on the card, such as membership number, loan data or even open contributions. The library employee thus receives a complete overview of all data of the borrower.

The Stick Reader EVO HF is an easy-to-use card reader. The processes within the library are enhanced by the exact readability of all data.

TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
Power Supply	5 Vdc
Power Consumption	< 100 mA
Operating Frequency	13.56 MHz
Reading Distance	up to 4 cm*
RF TX Speed	up to 848 kBd
Baudrate	9600 115200 bit/s
Antenna	integrated, $31.4 \times 15.2 \text{ mm}$
Interfaces	USB VCP USB HID** (Keyboard Layout: QWERTY) PC/SC
Connector	USB Type A plug
HID Output Format	ISO 14443 A: hexadecimal, lowercase, byte-reverse, LSB ISO 15693: hexadecimal, lowercase, MSB <i>HID Output of EPC Memory</i> <i>of UHF Tags will be displayed.</i> The HID output format can be modified on request.
Signals	LED shows successful tag communication with colour change

SDK INFORMATION Windows 7/8/8.1/10 (v6.7.3) Windows XP/Server 2003/ Vista/7/8/8.1 (v6.7) Supported OS by Windows 2K (v6.3a) Silabs USB VCP Driver WinCE (5.0, 6.0) Macintosh OSX (v4) Linux (3.x.x., 2.6.x) Android 4.2 Supported OS Windows 7, 8, 8.1, 10 ASCII command protocol, Supported Languages VS2005 C++ Demo Software Windows

APPLICABLE STANDARDS	
EMC	EN 301489-1:2012-04 (v1.9.21) EN 301489-3:2013-12 (V1.6.1)
Radio Regulation	EN 300330-1:2015-08 (V1.8.1) EN 300330-2:2015-08 (V1.6.1)
Safety	EN 60950-1:2014-08 EN 62369-1:2010-03 EN 50364:2010-11
RoHS	EC Guideline 2011/65/EU
Certificates	FCC, CE

MECHANICAL SPECIFICATIONS	
Dimensions	83.5 × 36 × 11.2 mm
Material	ABS (Acrylonitrile butadiene styrene)
Protection Class	IP40
Housing Colour	Black
Weight	20 g
Material	FR-4, blue

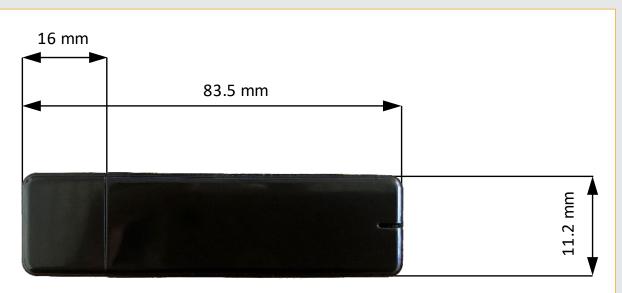
ENVIRONMENTAL CONDITIONS	
Operating Temperature	-20 °C +80 °C
Storage Temperature	-40 °C +85 °C
Humidity	up to 95%, non condensing
MTBF	200'000 hours

*READING DISCTANCE DEPENDS ON TAG, ANTENNA AND ENVIRONMENTAL CONDITIONS **HUMAN INTERFACE DEVICE.

AVAILABLE VERSIONS

	DESFIRE	ISO 18000-3	HF	MIFARE
GENERAL SPECIFIC	ATIONS			
Reader IC	NXP CLRC663	NXP CLRC663	NXP CLRC663	NXP CV520
Interface	USB VCP, PC/SC	USB VCP, USB HID**	USB VCP, USB HID**	USB VCP, USB HID**
SUPPORTED STANDARDS TAGS				
ISO 14443A and compatible	Read/Write: MIFARE® Classic Mini / 1K /4K, MIFARE Ultra- light®, MIFARE Ultra- light® C, MIFARE Ultra- light® Nano, MIFARE® DESFire®EV1, MIFARE® DESFire® Light, MIFARE® Smart MX, MIFARE® Plus S / X, MIFARE® Pro X, NTAG 21x, NTAG 424 Read UID only: Read UID only: Read UID only of all other ISO14443A RFID tags	Read/Write: MIFARE ® Classic Mini / 1K /4K, MIFARE Ultra- light®, MIFARE Ult- ralight® C, MIFARE® DESFire®EV1, MIFARE® Smart MX, MIFARE® Plus S / X, MIFARE® Pro X, NTAG 21x Read UID only of all other ISO14443A RFID tags	Read/Write: MIFARE® Classic Mini / 1K /4K, MIFARE Ultra- light®, MIFARE Ultra- light® C, NTAG 21x Read UID only: Read UID only of all other ISO14443A RFID tags, e.g.: MIFARE® DESFire®EV1, MIFARE® Smart MX, MIFARE® Plus S / X, MIFARE® Pro X	Read/Write: MIFARE® Classic Mini / 1K /4K, MIFARE Ultra- light®, MIFARE Ultra- light® C, NTAG 21x Read UID only: Read UID only of all other ISO14443A RFID tags
ISO 14443 B and compatible	SRI4K, SRIX4K, AT88RF020, 66CL160S, SR176	SRI4K, SRIX4K, AT88RF020, 66CL160S, SR176	SRI4K, SRIX4K, AT88RF020, 66CL160S, SR176	-
ISO 15693 and compatible	EM4135, EM4043, EM4x33, EM4x35, I-Code SLI/SLIX/ DNA, M24LR16/64, TI Tag- it HF-I, SRF55Vxx (my-d vicinity)	EM4135, EM4043, EM4x33, EM4x35, I-Code SLI / SLIX, M24LR16/64, TI Tag-it HF- I, SRF55Vxx (my-d vicinity)	EM4135, EM4043, EM4x33, EM4x35, I-Code SLI / SLIX, M24LR16/64, TI Tag-it HF- I, SRF55Vxx (my-d vicinity)	_
ISO 18000-3M3 and compatible	_	I-Code ILT-M	_	_

MECHANICAL VIEW



ORDER CODES

DESFIRE	
VERSION	ORDER CODE
DESFire Stick Reader USB	R-STICK-EVO-DES-USB
DESFire Stick Reader PC/SC	R-STICK-EVO-DES-PCSC

ISO 18000-3	
VERSION	ORDER CODE
ISO 18000-3 Stick Reader USB	R-STICK-EVO-18/3-USB
ISO 18000-3 Stick Reader HID	R-STICK-EVO-18/3-HID

HF	
VERSION	ORDER CODE
HF Stick Reader USB	R-STICK-EVO-HF
HF Stick Reader HID	R-STICK-EVO-HF-HID

MIFARE®	
VERSION	ORDER CODE
MIFARE Stick Reader USB	On Request - MOQ 50 Units
MIFARE Stick Reader HID	On Request - MOQ 50 Units

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