DESKTOP READER
NEO 2

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

- **HF** (ISO 14443A/B, ISO 15693, ISO 18000-3M3)
- **LF** (EM4200, Hitag-1, Hitag-S)

PRODUCT DESCRIPTION

Desktop Reader NEO 2 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 commerce, telecom, postal, banking or health care.

This new versatile 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 may 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.

It is available as HF or LF version. The HF Version 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. LF version reads tags of EM4200 and compatible, it can read and write Hitag-1 and Hitag-S chips.

Desktop Reader NEO 2 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.

TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
Power Supply	USB VCP + HID
Power Consumption	<200 mA
Operating Frequencies	HF: 13.56 MHz | LF: 125 kHz
Operating Distances	3 cm*
Standard UID Output	HF: ISO 14443A UID LSB LF: Read-only UID LSB
Antenna	integrated
Status	1x Bi-color LED 1x Buzzer
Interfaces	USB 2.0 (Plug-and-play)

MECHANICAL SPECIFICATIONS	
Dimensions	115 × 70 × 17 mm without USB cable
Weight	90 g incl. USB cable (Length: 120 cm)
Housing	ABS (black)

ENVIRONMENTAL CONDITIONS	
Operating Temperature	-20 °C ... +70 °C
Storage Temperature	-20 °C ... +80 °C
Humidity	up to 95%, non condensing

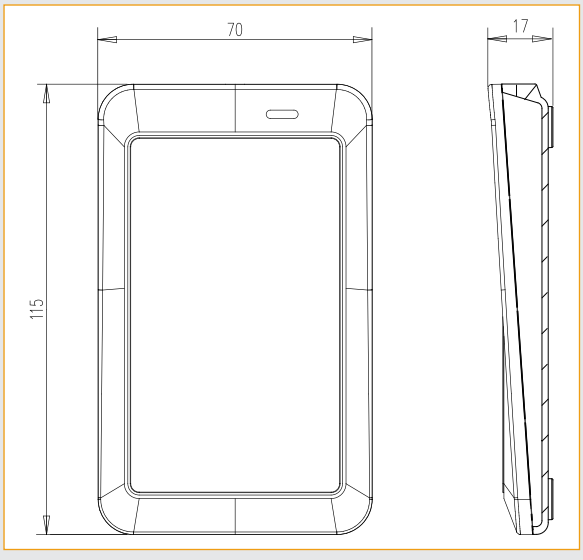
SDK INFORMATION	
Supported OS	Windows XP, Vista, 7, 8, 8.1, 10
Supported Languages	Binary command protocol, VS2005 C++
Demo Software	Windows

*Reading distance depends on tag and environmental conditions

SUPPORTED STANDARDS | TAGS	
RFID HF: 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
RFID LF: 125 kHz	
Read-only	EM4200 and compatible
FDX-B	Read information
Read/write	Hitag-1, Hitag-S

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

PRODUCT DIMENSIONS



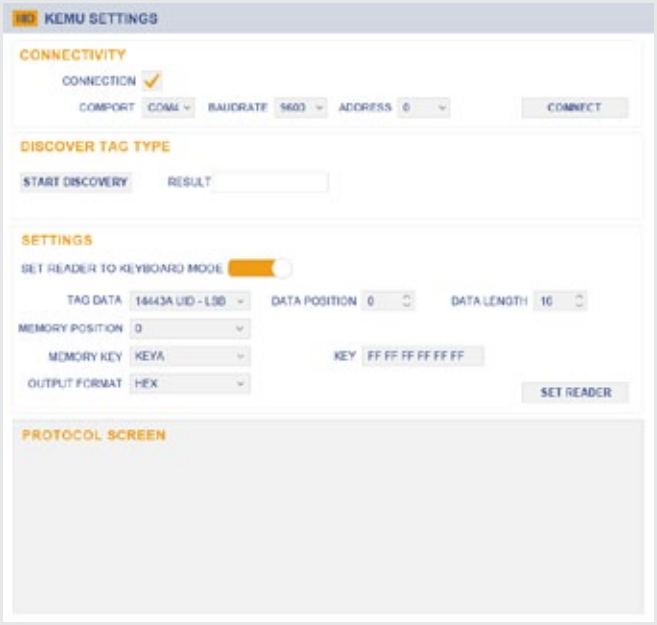
SOFTWARE SETTINGS TO CONFIGURE OUTPUT FORMAT

Operating Modes:

There are two working modes available on the Desktop Reader NEO 2:

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 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
Desktop Reader NEO 2 (HF Version)	R-DT-NEO2-HF
Desktop Reader NEO 2 (LF Version)	R-DT-NEO2-LF