Desktop Reader
NEO 2

PRODUCT DESCRIPTION

The Desktop Reader NEO 2 by iDTRONIC GmbH is a cutting-edge RFID reader and writer with USB connectivity, designed for diverse applications in PC log-on, document management, retail, fitness or healthcare applications.

This RFID desktop reader supports multiple RFID standards, including UHF, HF, NFC, LEGIC, and LF, and is compatible with various chips and transponders. A combined VCOM (read/write) and HID (keyboard emulation) functionality is available exclusively on the HF/NFC and LF models, while other models offer either VCOM or HID. Additionally, the HF/NFC model includes a PC/SC interface.

The configurable HID output, available for the HF/NFC and LF models, retrieves data from transponders as keyboard emulation, with various configurable output formats. The configuration is done through Windows OS configuration tool.

All RFID devices are available with software development kits for Windows and a command protocol for other operating systems or microcontroller programming, ensuring seamless integration into existing systems. The device is CE (RED) and FCC certified and adheres to RoHS 2 and REACH standards.

The Desktop Reader NEO 2 is a versatile and robust solution for your RFID needs, ensuring high performance and easy integration, ideal for IoT and web applications.

APPLICATIONS

- PC log-on
- Document Management
- Retail
- Fitness
- Healthcare

FEATURES

- USB Interface
- HID, VCOM or PC/SC
- Integrated Antenna
- LED and Buzzer Signal

RFID OPTIONS

- UHF (EPC C1 GEN2 | ISO 18000-63)
- HF | NFC
  - ISO 14443A/B
  - ISO 15693
  - ISO 18000-3M3
- LEGIC (Prime + Advant)
- LF (EM4200, Hitag-1, Hitag-S)

iDTRONIC

TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

Power Supply	USB
Power Consumption	<200 mA
Operating Frequency	HF | NFC | LEGIC: 13.56 MHz LF: 125 kHz UHF: 868 MHz (ETSI), 902-928 MHz
Operating Distances	UHF: 15cm HF / NFC: 5cm Legic 5cm LF: 5cm
Antenna	integrated
Status	1x Bi-color LED 1x Buzzer
Interface	USB - Virtual ComPort USB - HID USB - PC/SC
Connections	120 cm long cable with USB- Type-A plug

MECHANICAL SPECIFICATIONS

Dimensions	115 × 70 × 17 mm without USB cable
Weight	90 g incl. USB cable
Housing	ABS (black)

ENVIRONMENTAL CONDITIONS

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

SDK INFORMATION

Supported OS	Windows 7, 10, 11
Supported Languages	Binary command protocol, VS2005 C++
Demo Software	Windows

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

SUPPORTED STANDARDS / TAGS

RFID UHF: 868 MHz (ETSI). 902-928 MHz (FCC)

ISO 18000-63	Global UHF frequencies

RFID HF \| NFC \| LEGIC: 13.56 MHz

ISO 14443 A and compatible	Read/write: MIFARE® Classic/1K/4K, MIFARE Ultralight®/C, MIFARE® DESFire®EV1/2, DESFire®EV3, MIFARE® Smart MX, MIFARE® Plus S / X, MIFARE® Pro X, NTAG 21x, Read UID only: 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, I-Code SLI-3, M24LR16/64, TI Tag-it HF-I, SRF55Vxx (my-d vicinity)
ISO 18000-3M3	I-Code ILT-M
Legic RF-Standard	Full read/write operation: LEGIC Advant; LEGIC Prime Smart card cards with Card in Card (CIC) technology Legic Advant type AFS 4096-JP with loaded Legic

RFID LF: 125 kHz

Read-only	EM4200 and compatible
FDX-B	Read information
Read/write	Hitag-1, Hitag-S

READING DISCTANCE DEPENDS ON TAG, ANTENNA AND ENVIRONMENTAL CONDITIONS.

SUPPORTED FEATURES	UHF	HF	LEGIC	NDEF	HF + LF	LF
USB - VCOM & HID						
USB - VCOM						
USB - HID						
USB - PC/SC						

	UHF	HF	LEGIC	NDEF	HF + LF	LF
UID capturing						
Memory Read						
Memory Write						
Anti Collision						
All commands available (transparent command)						

STANDARD UID OUTPUT	UHF	HF	LEGIC	NDEF	HF + LF	LF
Desktop Reader EVO HF 2.0						
Desktop Reader EVO HF 2.0 HID						

ORDER CODES

VERSIONS	ORDER CODES
Desktop Reader NEO 2 - UHF Version	R-DT-NEO2-UHF
Desktop Reader NEO 2 - UHF Version, preconfigured to HID	R-DT-NEO2-UHF-HID
Desktop Reader NEO 2 - HF | NFC Version	R-DT-NEO2-HF
Desktop Reader NEO 2 - HF | NFC Version, preconfigured to HID	R-DT-NEO2-HF-HID
Desktop Reader NEO 2 - HF | NFC PC / SC Version	R-DT-NEO2-HF-PC/SC
Desktop Reader NEO 2 - LEGIC Version	R-DT-NEO2-LEGIC
Desktop Reader NEO 2 - LF Version	R-DT-NEO2-LF
Desktop Reader NEO 2 - LF Version, preconfigured to HID	R-DT-NEO2-LF-HID
Desktop Reader NEO 2 - Dual Frequency HF + LF Version	R-DT-NEO2-HF/LF
Desktop Reader NEO 2 - Dual Frequency UHF + HF Version	R-DT-NEO2-UHF/HF
Desktop Reader NEO 2 - Dual Frequency UHF + HF Version, preconfigured to HID	R-DT-NEO2-UHF/HF-HID