



HF | NFC Desktop Reader

NEO 2



PRODUCT DESCRIPTION

The HF | NFC Desktop Reader NEO 2 by iDTRONIC GmbH is a high-performance RFID reader and writer with USB connectivity, designed for applications such as PC log-on, document management, retail, fitness, and healthcare.

This HF | NFC RFID desktop reader operates at 13.56 MHz and supports ISO 14443 A/B, ISO 15693, and ISO 18000-3M3 transponders. It is compatible with a wide range of RFID tags, including MIFARE® Classic, MIFARE® DESFire, NTAG®, and I-Code SLIX, ensuring secure and efficient RFID authentication.

The device features VCOM (read/write) and HID (keyboard emulation) functionality, enabling seamless data retrieval and flexible integration. Additionally, it includes a PC/SC interface, providing enhanced security and compatibility for smart card applications.

The configurable HID output allows customized data formats, managed via a Windows OS configuration tool, ensuring smooth operation across various system environments.

A software development kit (SDK) for Windows and a binary command protocol ensure easy integration into other operating systems and microcontroller-based applications. The device is CE (RED) and FCC certified and complies with RoHS 2 and REACH standards.

The HF | NFC Desktop Reader NEO 2 is a versatile and robust RFID solution, delivering high performance and seamless integration, making it ideal for industrial, commercial, and IoT 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

- HF | NFC
 - ISO 14443A/B
 - ISO 15693
 - ISO 18000-3M3



TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

| | |
|---------------------|--|
| Power Supply | USB |
| Power Consumption | <200 mA |
| Operating Frequency | HF NFC: 13.56 MHz |
| Operating Distances | HF NFC: 5cm |
| Antenna | integrated |
| Status | 1x Bi-color LED 1x Buzzer |
| Interface | USB - Virtual ComPort USB - Virtual ComPort + HID 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 |

STANDARD UID OUTPUT

| | |
|-------------------------------|-----|
| Desktop Reader EVO HF 2.0 | LSB |
| Desktop Reader EVO HF 2.0 HID | LSB |

SUPPORTED FEATURES

| | |
|--|-----|
| UID capturing | Yes |
| Memory Read | Yes |
| Memory Write | Yes |
| Anti Collision | Yes |
| All commands available (transparent command) | Yes |

ORDER CODES

VERSIONS

| |
|---|
| Desktop Reader NEO 2 - HF NFC Version |
| Desktop Reader NEO 2 - HF NFC Version, preconfigured to HID |
| Desktop Reader NEO 2 - HF NFC PC / SC Version |
| Desktop Reader NEO 2 - Dual Frequency HF + LF Version |

ORDER CODES

| |
|--------------------|
| R-DT-NEO2-HF |
| R-DT-NEO2-HF-HID |
| R-DT-NEO2-HF-PC/SC |
| R-DT-NEO2-HF/LF |

SDK INFORMATION

| | |
|---------------------|--|
| Supported OS | Windows 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 HF NFC 13.56 MHz | |
| ISO 14443 A and compatible | Read/write: MIFARE® Classic/1K/4K, MIFARE Ultralight®/C, MIFARE® DESFire®EV1/3, MIFARE® Smart MX, MIFARE® Plus S / X, MIFARE® Pro X, NTAG 213, 215, 216, 196, DNA 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-2, M24LR16/64, TI Tag-it HF-I, SRF55Vxx (my-d vicinity) |
| ISO 18000-3M3 | I-Code ILT-M |

***READING DISTANCE DEPENDS ON TAG, ANTENNA AND ENVIRONMENTAL CONDITIONS.**