



Dual Desktop Reader

NEO 2 HF + UHF HID



PRODUCT DESCRIPTION

The Dual HF + UHF HID 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 Dual HF + UHF HID desktop reader operates at 13.56 MHz (HF) and 868 MHz (ETSI) / 902–928 MHz (FCC) (UHF), supporting ISO 14443 A/B, ISO 15693. It is compatible with a wide range of HF transponders, including MIFARE® Classic, MIFARE® DESFire, NTAG®, and I-Code SLIX, as well as UHF EPC Class 1 Gen 2 transponders, ensuring secure and efficient RFID authentication.

The configurable HID output allows customized data formats, managed via a Windows OS configuration tool, ensuring smooth operation for different transponder types.

The reader sets at UHF - the EPC, HF - the UID

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 Dual HF + UHF HID 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 or VCOM
- Integrated Antenna
- LED and Buzzer Signal

RFID OPTIONS

- HF | NFC
 - ISO 14443A/B
 - ISO 15693
- UHF
(EPC C1 GEN2 | ISO 18000-63)



TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

Power Supply	USB
Power Consumption	<500 mA
Operating Frequency	HF NFC: 13.56 MHz UHF: 868 MHz (ETSI), 902-928 MHz
Operating Distances	HF NFC: 5cm UHF: 15cm
Antenna	integrated
Status	1x Bi-color LED 1x Buzzer
Interface	USB - HID
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 + UHF2.0	HexLSB
Desktop Reader EVO HF + UHF 2.0 HID	HexLSB

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

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

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

ORDER CODES

VERSIONS

Desktop Reader NEO 2 - Dual Frequency HF + UHF Version, preconfigured to HID

ORDER CODES

R-DT-NEO2-UHF/HF-HID