iDTRONIC
PROFESSIONAL RFID

HF | NFC ACCESS READER
NEO

PRODUCT DESCRIPTION

HF | NFC Access Reader NEO is a sleek and compact RFID read / write device with an integrated antenna. It is equipped with either an Ethernet, RS485 (Modbus), Wiegand or USB 2.0 interface.

The 13.56 MHz HF Version supports the standards ISO 14443 A/B and ISO 15693. It reads and writes MIFARE® Classic Mini, 1K and 4K, Plus, SMART, DESFire, Ultralight or NTAG transponders.

HF | NFC Access Reader NEO allows for reading ranges of up to 5 centimeters, depending on tag type and orientation. Its compact and sleek design with LED status indicator and IP65 protection class distinguish the RFID reader from other readers.

The HF | NFC Access Reader NEO version with the Ethernet interface is equipped with an additional inputs/output (I/O) providing flexibility for your system integration.

iDTRONIC's HF | NFC Access Reader NEO comes with a useful SDK for the development of controller, Linux or Windows based applications. Beside the documentation, command protocols, the SDK includes a Windows based demo application with full functionality over all supported HF RFID standards.

▶ APPLICATIONS

- Reading of ID and member cards
- Access / Time logging systems
- Employee identification on production lines
- Payment, POS System, Loyalty
- R/W of transponder at PC
- Mobile application
- PC Log-on; online payment

▶ FEATURES

- Integrated antenna
- Ethernet, RS485 (Modbus), Wiegand or USB interface
- LED indicator
- IP65 Protection
- Power 5V or 12V
- SDK included

▶ RFID OPTIONS

- ISO 14443A
- ISO 14443B
- ISO 15693

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TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
Power Supply	5 V (pigtail cable) or 12 V
Current Consumption	< 90 mA
Operating Frequency	13.56 MHz
Operating Distance	up to 5 cm*
Antenna	integrated
Reader IC	NXP CLRC632
RF TX Speed	up to 424 kBd
Interfaces	Ethernet (1x I/O), RS485 (MODBUS), Wiegand (26 or 34bit), USB-VCP or USB-HID
Input / Output -Ethernet Version only-	1x Relay C-NC-NO Max. switching power: 30 W / 37.5 VA Max. switching voltage: 220 Vdc / 250 Vac Max. switching current: 1 A Max. carrying current: 1 A Initial contact resistance: Maxi. 100 mΩ
Baudrate on VCP	9600...115200 Bd
Connector	10 cm pigtail cable (power & data)
Signals	Status LED

MECHANICAL SPECIFICATIONS	
Dimensions	100 × 46 × 20 mm
Material	ABS (Acrylonitrile butadiene styrene)
Housing Colour	Black
Weight	48 g

ENVIRONMENTAL CONDITIONS	
Operating Temperature	-20 °C ... +70 °C
Storage Temperature	-20 °C ... +80 °C
Humidity	up to 95 %, non condensing
Protection Class	IP65
MTBF	200'000 h

* Reading distance depends on tag type and orientation.

SUPPORTED STANDARDS | TAGS	
ISO 14443 A and compatible	Read/write: MIFARE® Classic Mini/1K /4K, MIFARE Ultralight®, MIFARE Ultralight® C, MIFARE Ultralight® Nano, MIFARE® DESFire® EV1, MIFARE® DESFire® Light, MIFARE® Smart MX, MIFARE® Plus S / X, MIFARE® Pro X, NTAG 21x, NTAG 424 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/DNA, M24LR16/64, TI Tag-it HF-I, SRF55Vxx (my-d vicinity)

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, IC

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

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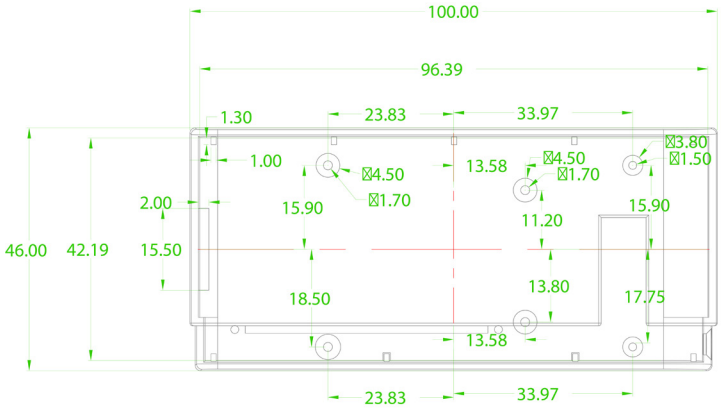
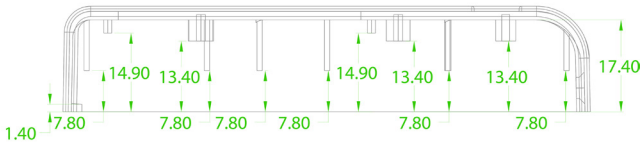
PRODUCT PICTURES

MECHANICAL DRAWING





ORDER CODES

VERSIONS	ORDER CODES
HF | NFC Access Reader NEO - Ethernet + I/O (12V)	R-EA-WR-ID500-ETH
HF | NFC Access Reader NEO - USB-VCP (5V)	R-EA-WR-ID500-USB
HF | NFC Access Reader NEO - USB-HID (5V)	R-EA-WR-ID500-HID
HF | NFC Access Reader NEO - Modbus RTU (12V)	R-EA-WR-ID500-485
HF | NFC Access Reader NEO - Wiegand 26bit (12V)	R-EA-WR-ID500-W26
HF | NFC Access Reader NEO - Wiegand 34bit (12V)	R-EA-WR-ID500-W34

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