

MPR Series

HF READER 4CH / 8CH



PRODUCT DESCRIPTION

The MPR Series HF Reader 4CH / 8CH is a high performance RFID Reader for the integration into check-in counters, libraries, retail or shelving systems. With its cutting edge microcontroller and latest HF transceiver technology, the module allows users to read and write 13.56 MHz transponders supporting the common RFID standard ISO 14443A/B and ISO15693.

Thanks to its 8 antenna ports the MPR Series HF Reader 4CH / 8CH achieves reading ranges of up to 10 cm (depending on type of transponder). Its serial based interface RS485 allows an easy and fast integration into existing electronics or a fast paced new development of highend identification applications.

iDTRONIC's hardware comes with a useful SDK for the development of controller, Linux or Windows-based applications. Beside the documentation, command protocols and source codes, the SDK includes a Windows-based demo application with full functionality over the supported HF RFID standard.

APPLICATIONS

- Library
- Retail
- Luggage Identification
- Shelving Systems
- Lean Production

FEATURES

- Reading Range up to 10 cm
- SDK and Windows based application are supplied
- 4 / 8 Antenna Ports

AVAILABLE INTERFACES

- CANopen
- RS232
- RS485
- USB virtual
- TCP/IP POE
- Modbus

RFID OPTIONS

- HF
 - ISO 14443A/B
 - ISO 15693



TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

Power Supply	PoE oder 7 ~ 24 Vdc
Power Consumption	< 150 mA, standby current < 2 mA (low power mode)
Operating Frequency	HF: 13.56 MHz
Reading Range	up to 10 cm*
Interfaces	CANopen RS232, RS485, USB virtual, TCP/IP PoE, Modbus
RT FX Speed	up to 848 kBd
Antenna	External
Antenna Connector	SMA Connectors
Interface	TCP/IP - Ethernet (PoE) On Request: RS485
Connector	M12 Connector

MECHANICAL SPECIFICATIONS

Dimensions	100 x 100 mm
Material	ABS
Mounting Option	Screwing
Weight	4CH: 152 g 8CH: 164 g

ENVIRONMENTAL CONDITIONS

Operating Temperature	-20 °C ... +80 °C
Storage Temperature	-40 °C ... +85 °C
Humidity	up to 95 %, non condensing
MTBF	200'000 h

SDK INFORMATION

Supported OS	Windows 7, 8, 8.1, 10
Supported Languages	C# language
Demo Software	Windows

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
RED	2014/53/EU
RoHS 2	2011/65/EU
REACH	1907/2006
Certificates	CE

SUPPORTED STANDARDS / TAGS

ISO 14443 A	Read/write: MIFARE® Classic 1K /4K, MIFARE Ultralight®, MIFARE Ultralight® C, MIFARE DESFire® EV1/EV2/EV3, MIFARE® Smart MX, MIFARE® Plus S / X, MIFARE® Pro X, NTAG 21x Read UID only: all other ISO 14443A RFID tags
ISO 14443 B	SRI4K, SRIX4K, AT88RF020, 66CL160S, SR176
ISO15693 and compatible	EM4135, EM4043, EM4x33, EM4x35, I-Code SLI / SLIX / DNA, M24LR16 / 64, TI Tag-it HF-I, SRF55Vxx (my-d vicinity)

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

ORDER CODES

VERSIONS	ORDER CODES
MPR Series HF Reader 4CH	R-MP-HF-4CH-232 R-MP-HF-4CH-ET/POE
MPR Series HF Reader 8CH	R-MP-HF-8CH-232 R-MP-HF-8CH-ET/POE