

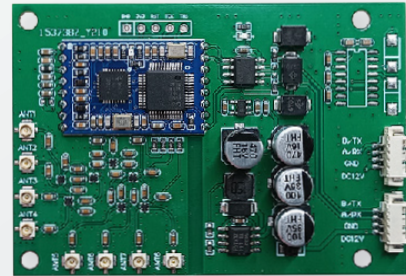
# Embedded Module HF **M980**

## PRODUCT DESCRIPTION

The iDTRONIC HF | NFC Embedded Module M980 is a high performance and low-cost RFID module 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 ISO15693.

Thanks to its 8 antenna ports the HF | NFC Embedded Module M980 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
- 8 Antenna Ports
- RS485 Interface

## RFID OPTIONS

- ISO 15693

## TECHNICAL DATA

### ELECTRICAL SPECIFICATIONS

Power Supply	7 ~ 24 Vdc
Power Consumption	< 150 mA, standby current < 2 mA (low power mode)
Operating Frequency	13.56 MHz
Reading Distance	up to 10 cm*
Antenna	External
Baudrate	9600 ... 115200 bit/s (default 115200bps)
Antenna Connector	U.FL
Interface	RS485
Connector	JST XH 2.0mm pitch

### MECHANICAL SPECIFICATIONS

Material	FR-4, Green
Mounting Option	Screwing

### ENVIRONMENTAL CONDITIONS

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

### GENERAL SPECIFICATIONS

Dimensions	48 × 65 × 9.7 mm
Weight	50 g
RT FX Speed	up to 848 kBd
Reader IC	NXP CLRC663

### 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

ISO15693 and compatible	EM4135, EM4043, EM4x33, EM4x35, I-Code SLI / SLIX / DNA, M24LR16 / 64, TI Tag-it HF-I, SRF55Vxx (my-d vicinity)
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**\*READING DISTANCE DEPENDS ON TAG,  
ANTENNA AND ENVIRONMENTAL CONDITIONS.**

## ORDER CODES

### VERSIONS

HF | NFC Embedded Reader M980 - RS485

### ORDER CODES

OEM-M980-485