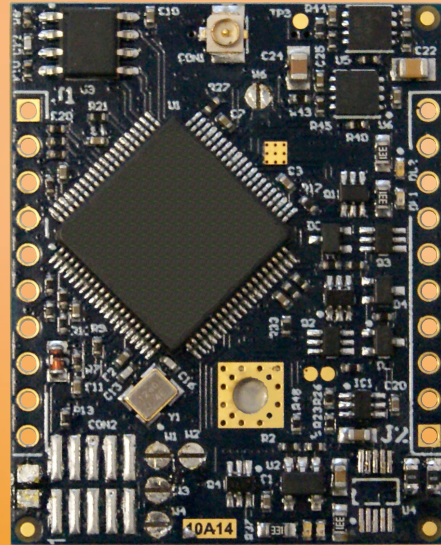


# UHF Module M900



## Applications

- Industrial Automation
- Mobile Computing
- Machine Control
- Self-Service Devices

## Features

- Max 27 dBm power
- Up to 5.5 meters read range
- TTL or RS232 interface
- Supports ETSI & FCC frequencies

## RFID Options

- UHF (EPC C1 GEN2 / ISO18000-6C)

## Description

The M900 embedded UHF RFID Module is a tiny read/write device with up to 27 dBm power output and a reading distance of up to 5.5 meters\*.

This 1 port reader Module is designed to perform with all ISO18000-6C tags including EPC Class1 Gen2 based on the UHF 840 – 960 MHz global frequency band (ETSI + FCC). It can be used for a wide variety of applications such as mobile computing, industrial automation or machine control systems.

iDTRONIC's M900 is a compact single board UHF RFID reader Module which provides RS232 or TTL interfaces and comes with a complete SDK & testing software for Windows based operating systems.

## Technical Data

Electrical Specifications	
Power Supply	5 Vdc (±5 % regulated)
Power Consumption	max. 800 mA
Operating Frequency	840–960 MHz, software programmable
Max. Power	max 27 dBm / 500 mW, software programmable in 1 dBm steps
Operating Distance	up to 5.5 meters*
Antenna Connector	U.FL connector
Inputs / Outputs	2 inputs / outputs software configurable
Status	4 LEDs
Interfaces	TTL (0–5V) RS232

Mechanical Specifications	
Dimensions	30.56 × 38.40 × 6.50 mm

\*Reading distance depends on tag, antenna and environmental conditions

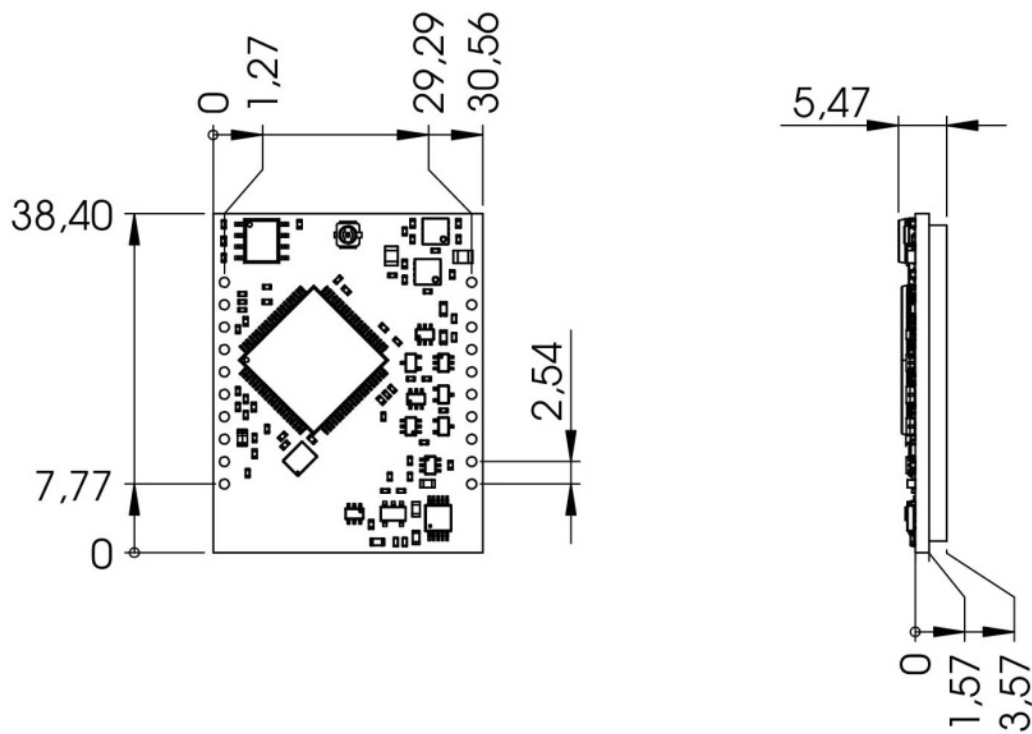
Environmental Conditions	
Operating Temperature	–10°C ... +55°C
Storage Temperature	–20°C ... +85°C
Humidity	up to 95%, non condensing

Supported Standards / Tags	
Standard ISO 18000-6C (EPC Class 1 Generation 2)	

Applicable Standards	
Radio Regulation	Europe: EN 302 208 V1.4.1

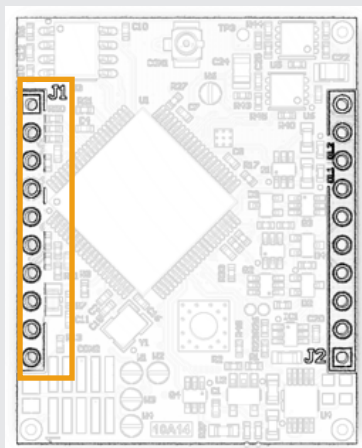
SDK Information	
Supported OS	Windows XP, Vista, 7, 8
Supported Languages	C++, C# Command Protocol
Download Link	<a href="http://idtronic-rfid.com/support/sdks/">http://idtronic-rfid.com/support/sdks/</a>

## Mechanical View



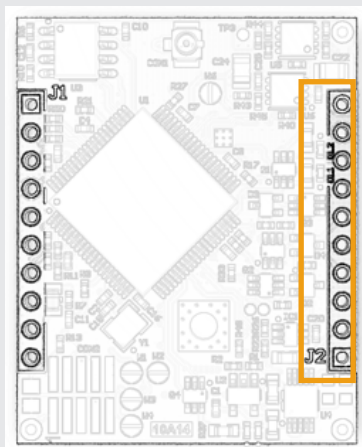
All Dimensions in millimeters (mm)

## Pin Layout



### Connections on J1

Pin	No	Description	
		TTL	RS232
n.c.	1	Not connected	Not connected
n.c.	2	Not connected	Not connected
n.c.	3	Not connected	Not connected
- Vin (Gnd)	4	DC power supply GND	DC power supply GND
n.c.	5	Not connected	Not connected
n.c.	6	Not connected	Not connected
n.c.	7	Not connected	Not connected
n.c.	8	Not connected	Not connected
n.c.	9	Not connected	Not connected
n.c.	10	Not connected	Not connected



### Connections on J2

Pin	No	Description	
		TTL	RS232
+Vin	10	DC power supply 5Vdc ±5%	DC power supply 5Vdc ±5%
-Vin (GND)	9	DC power supply return	DC power supply return
LED 1	8	Green external LED	Green external LED
LED 2	7	Red external LED	Red external LED
I/O 2	6	Universal digital Input/Output	Universal digital Input/Output
n.c.	5	Not connected	Not connected
I/O 1	4	Universal digital Input/Output	Universal digital Input/Output
TEST	3	Do not connect	Do not connect
TxD	2	TTL serial line (to host)	RS232 serial line (to host)
RxD	1	TTL serial line (from host)	RS232 serial line (from host)

## Order Codes

Version	Order Code
TTL	OEM-UHF-M900-TTL
RS232	OEM-UHF-M900-232

iDTRONIC GmbH  
 Donnersbergweg 1  
 67059 Ludwigshafen  
 GERMANY

Phone +49 (0) 621 66 90 09 4-0  
 Fax +49 (0) 621 66 90 09 4-9  
 E-Mail: info@idtronic-rfid.com  
 Web: idtronic-rfid.com

For further information & prices, please contact info@idtronic-rfid.com

Subject to alteration without prior notice  
 ©2016 iDTRONIC GmbH