

UHF Module M900



Applications

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

Features

- · Max 27dBm 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 27dBm 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. 800mA	
Operating Frequency	840 – 960 MHz, software programmable	
Max. Power	max 27dBm / 500mW, software programmable in 1dBm 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 Specif	fications
Dimensions	30.56 × 38.40 × 6.50mm
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 $^{{}^{*}\}mbox{Reading distance depends on tag, antenna and environmental conditions}$

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

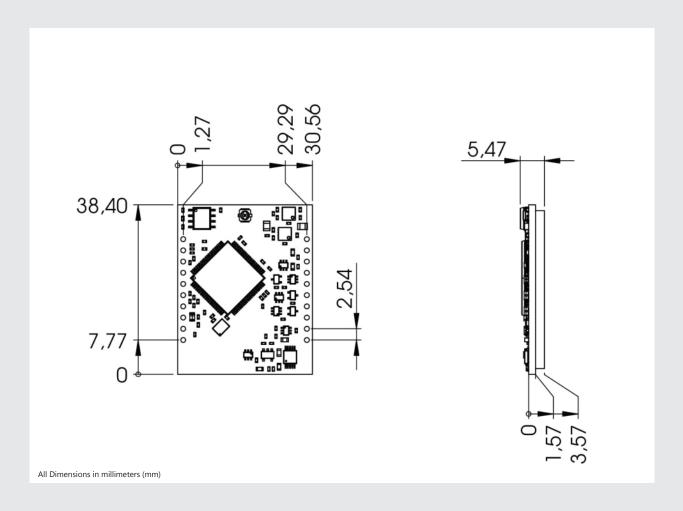
Supported Standards / Tags

Standard ISO 18000-6C (EPC Class 1 Generation 2)

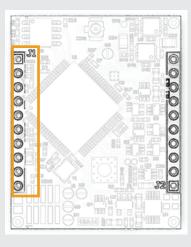
Applicable Standards		
Radio Regulation	Europe: EN 302 208 V1.4.1	

SDK Information		
Supported OS	Windows XP, Vista, 7, 8	
Supported Languages	C++, C# Command Protocol	
Download Link		

Mechanical View



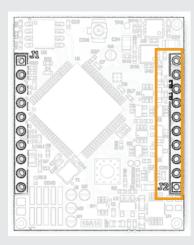
Pin Layout



Connections on J1

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

Order Codes

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

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