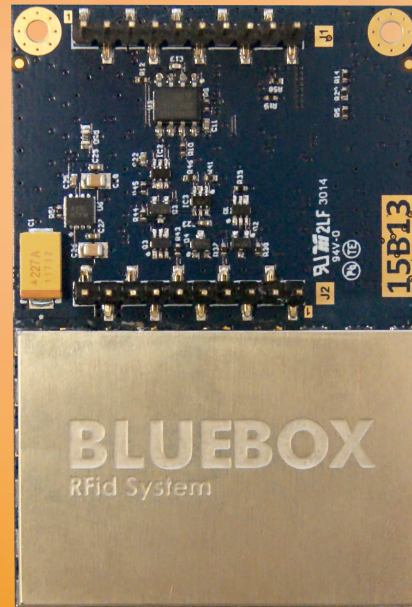


# UHF Module M950



## Description

M950 4 channel embedded UHF RFID Module offers state of the art performance with up to 30dBm power output and a reading distance of up to 10 meters/33feet\*.

This reader Module with 4 U.FL antenna ports and auto impedance tuning is designed to perform with all ISO18000-6C tags including EPC Class1 Gen2 based on the UHF 840–960MHz frequency band (ETSI & FCC).

The M950 is a compact powerful single board UHF RFID reader/writer which provides RS232 or TTL interfaces and comes with a complete SDK & testing software for Windows based operating systems.

It can be used for a wide variety of applications and offers time to market advantages to all OEM's, VAR and solution providers.

### Applications

- Industrial Automation
- Logistics
- Tracking & Tracing
- Parking Automation

### Features

- Max 30dBm power
- Up to 10m/33ft. read range
- TTL or RS232 interface
- Antenna Auto Tuning Modus
- ETSI & FCC frequencies

### RFID Options

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

## Technical Data

Electrical Specifications	
Power Supply	5 VDC (±5 % regulated)
Power Rating	max. 10W @RFOUT=30dBm
Operating Frequency	840 – 960 MHz, software programmable
Max. Power	max 30dBm / 1W, software programmable in 1dB steps
Operating Distance	up to 10 meters / 33 feet*
Antenna Connector	4 U.FL connector (50Ω)
Inputs / Outputs	2 inputs / outputs software configurable
Status	8 LEDs
Interfaces	TTL (0-5V) RS232

Mechanical Specifications	
Dimensions	66.00 x 45.00 x 6.50mm

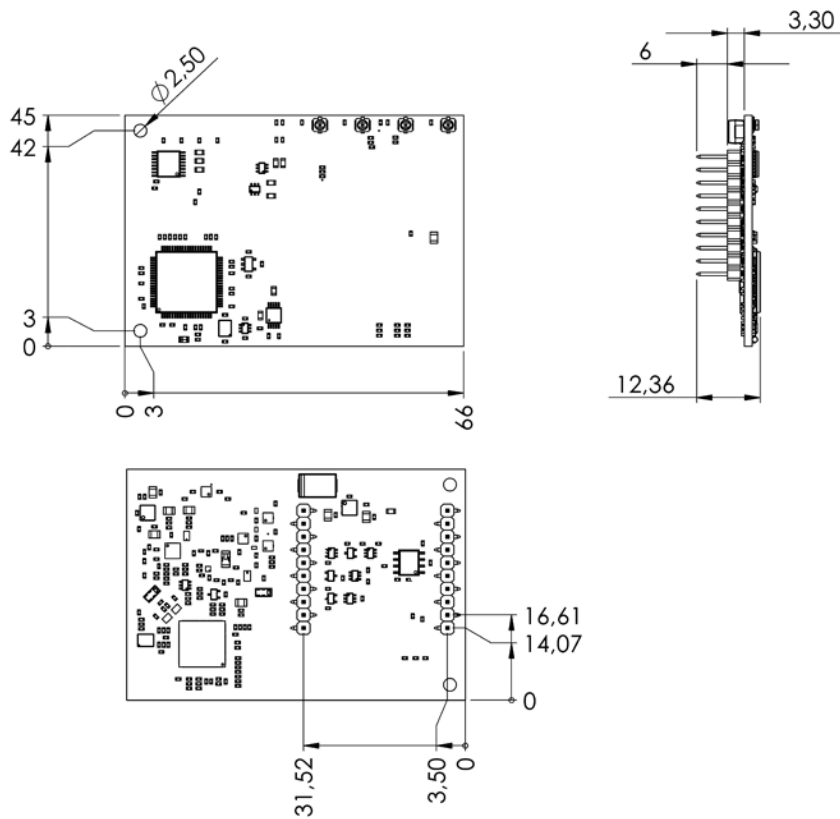
Environmental Conditions	
Operating Temperature	-10°C ... +55 °C
Storage Temperature	-20°C ... + 85°C
Humidity	up to 95%, non condensing

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

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

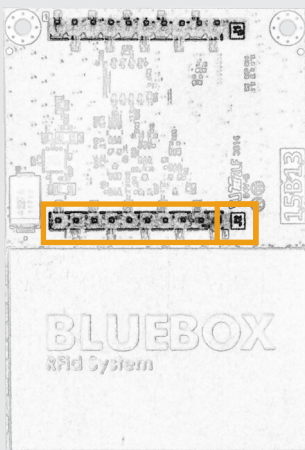
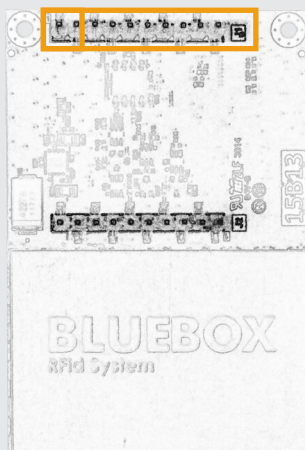
\*Reading distance depends on tag, antenna and environmental conditions

## 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
+ Vin	3	DC power supply 5Vdc ±5%	DC power supply 5Vdc ±5%
- Vin (Gnd)	4	DC power supply return (GND)	DC power supply return (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
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 (GND)	DC power supply return (GND)
+ Vin	10	DC power supply 5Vdc ±5%	DC power supply 5Vdc ±5%

## Order Codes

Version	Order Code
TTL	OEM-UHF-M950-TTL
RS232	OEM-UHF-M950-232

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