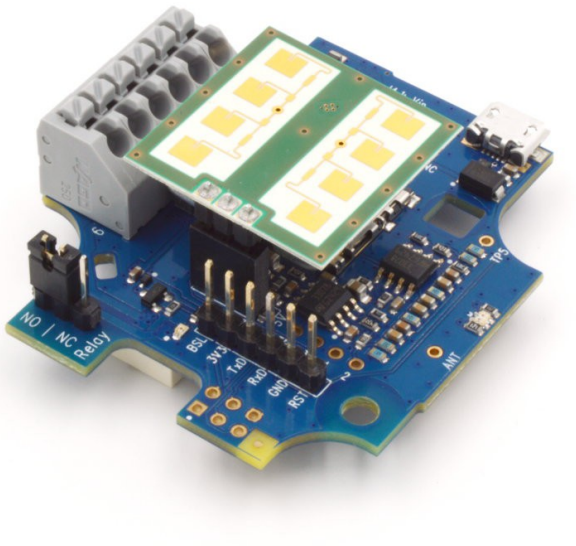
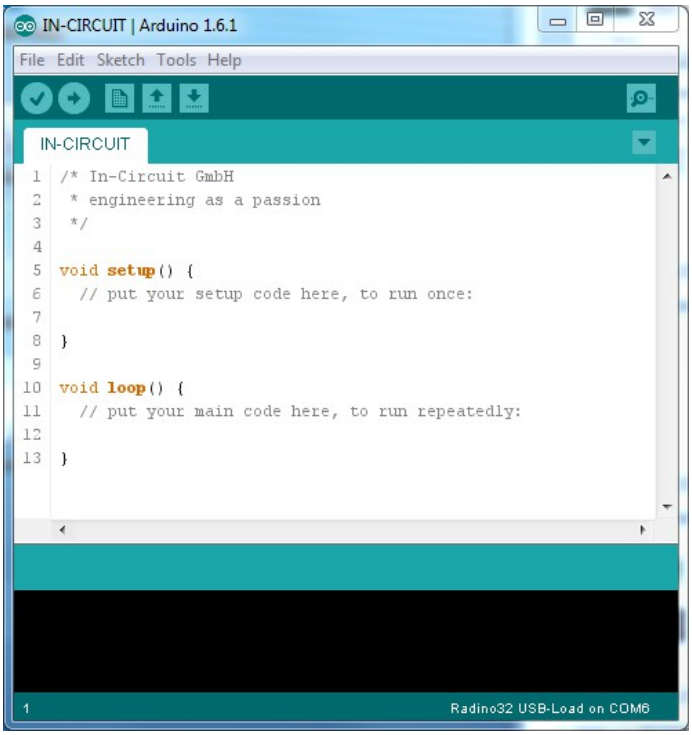
radino IP65-Radar

The In-Circuit radino IP65-Radar is a radar sensor module based on the In-Circuit radino-series.

The In-Circuit radino IP65-Radar is a free programmable radar sensor module for relative speed measurement and motion detection with the RSM-1650 radar sensor.

The radino IP65-Radar comes with a preinstalled radino 32 Wifi.



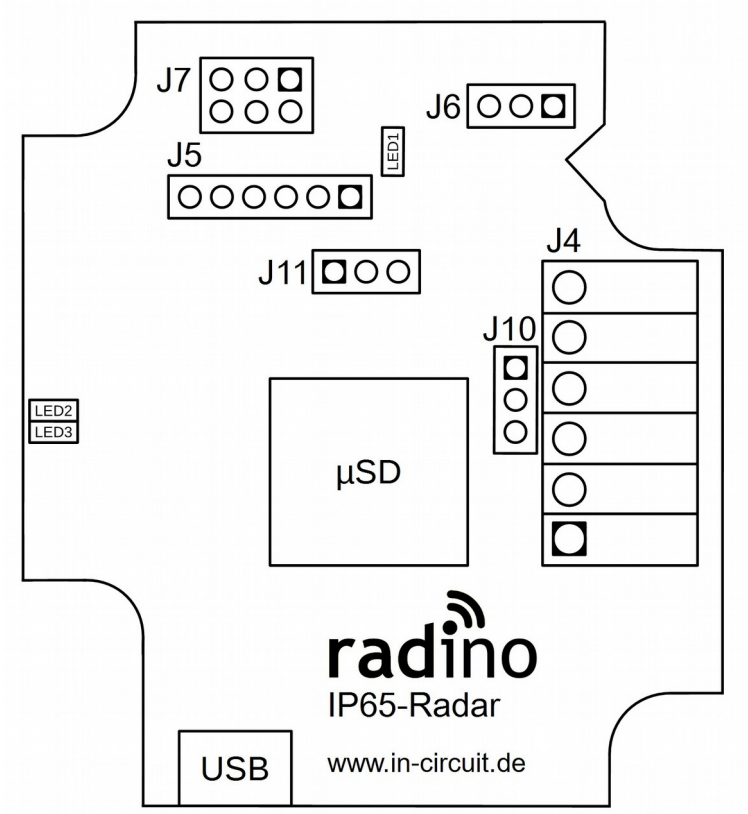


Features

- Arduino compatible
- High sensitivity on slightest movement
- Separate sending and receiving antenna for maximum consumption
- 24 GHz sending frequency
- Dust and water protected by IP65 enclosure
- RS-485 for external communication
- MicroSD card connector
- External usable relay (NC or NO selectable)
- Programmable with USB or UART
- Wireless communication by using the radino radio module

For more information visit: http://www.in-circuit.de/
http://www.radino.cc/

Pinout



J4	Description
1	Vin (7V - 24V)
2	GND
3	RS-485 B
4	RS-485 A
5	Relay COM
6	Relay NO/NC

J5	Description
1	Boot select
2	3V3
3	UART TX
4	UART RX
5	GND
6	Reset

J6	Description
1	Relay NO
2	Relay NO/NC
3	Relay NC

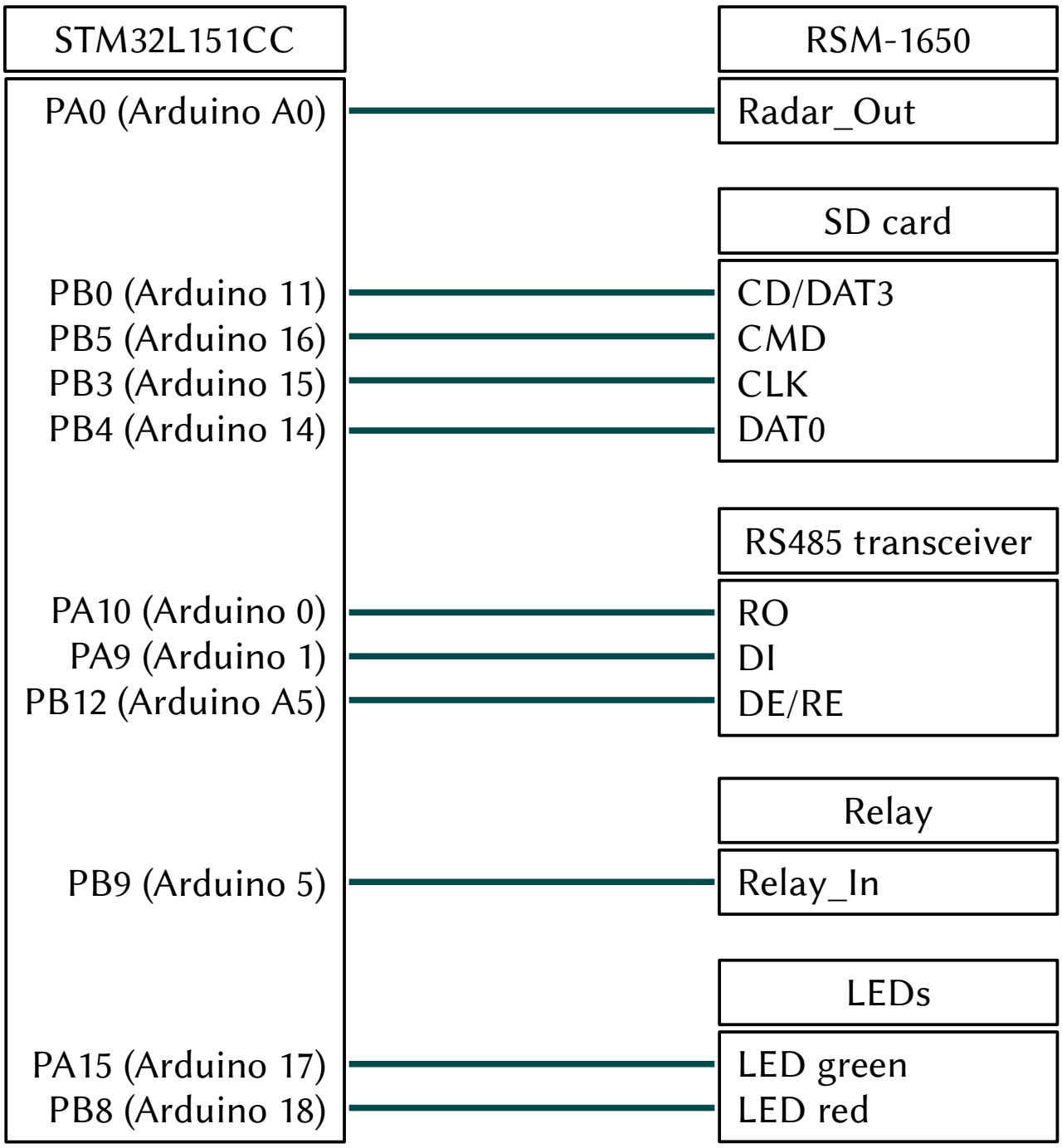
J7	Description
1	Reset
2	3V3
3	SWD IO
4	SWD CLK
5	DBG TX
6	GND

J10	Description
1	5V
2	Radar sensor
3	GND

J11	Description
1	5V
2	Radar sensor
3	GND

LED	Description
1	Power LED
2	LED green
3	LED red

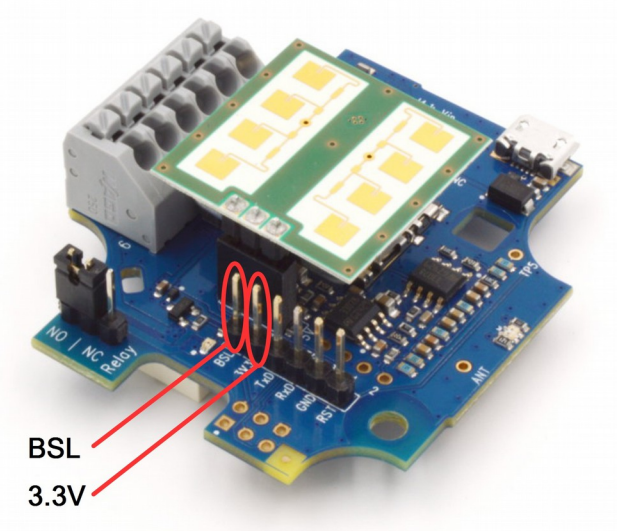
Connection diagram



Program

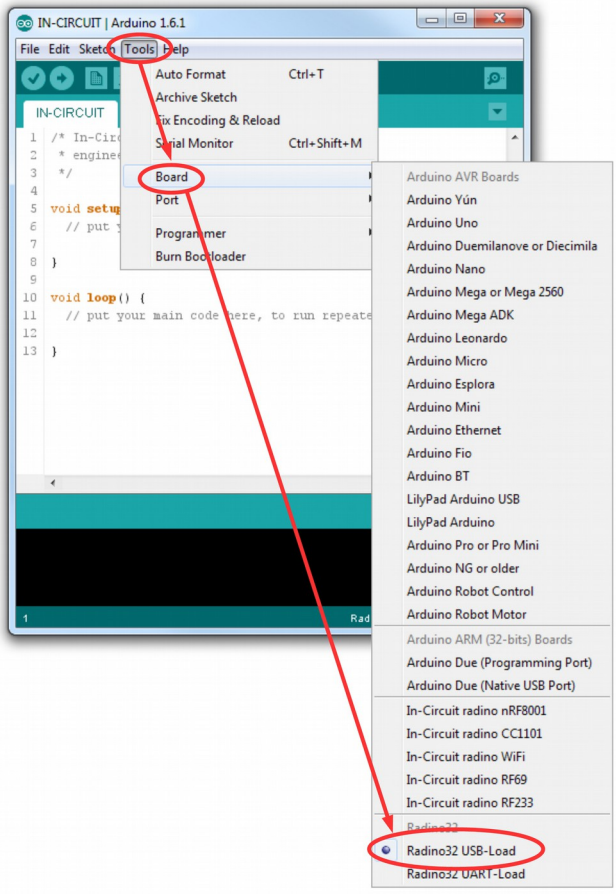
Starting the radino IP65-Radar bootloader

- Remove supply voltage
- Connect boot select (BSL) and 3.3V
- Apply supply voltage



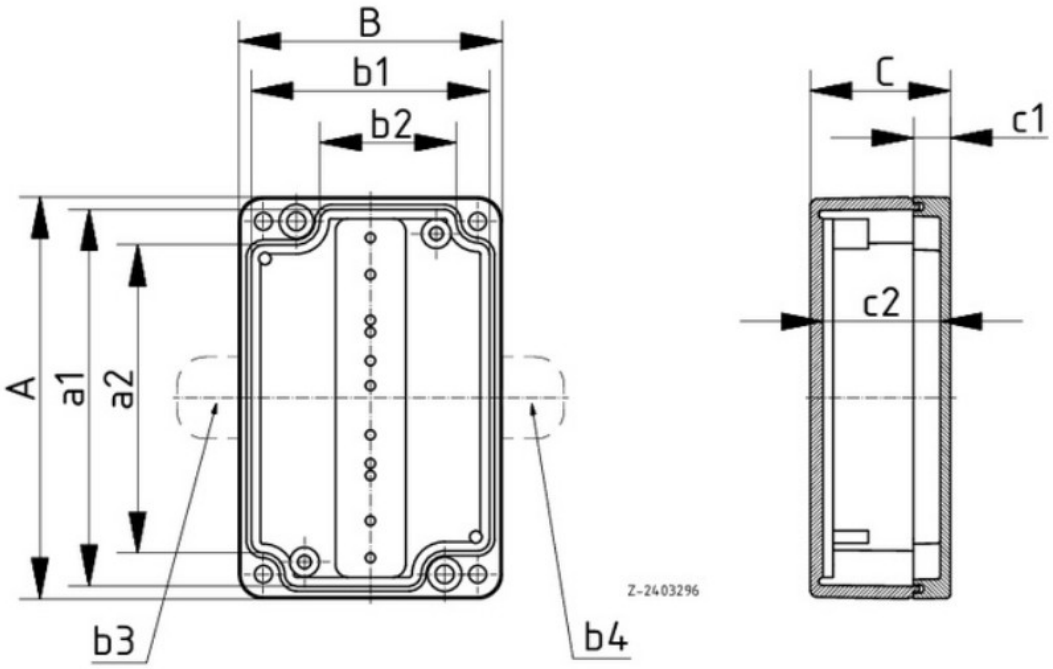
Starting Arduino IDE version 1.6.0 or 1.6.1 with the radino library

- Select "radino32 USB-Load" under "Tools → Board"
- Start radino IP65-Radar to bootloader
- Press the "Verify" button in the Arduino IDE to compile
- Press the "Upload" button to start flashing the radino IP65-Radar



Removing the supply voltage and the connection between boot select and 3.3V. Apply the supply voltage again to set the radino IP65-Radar to running mode.

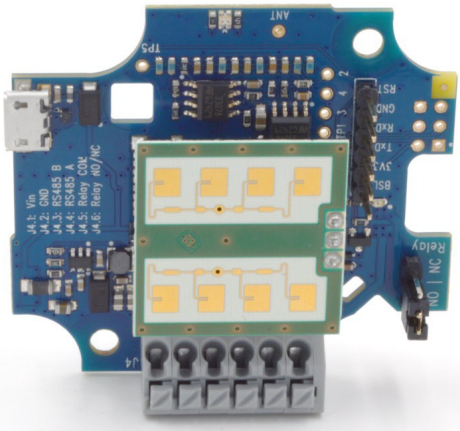
Mechanical dimensions



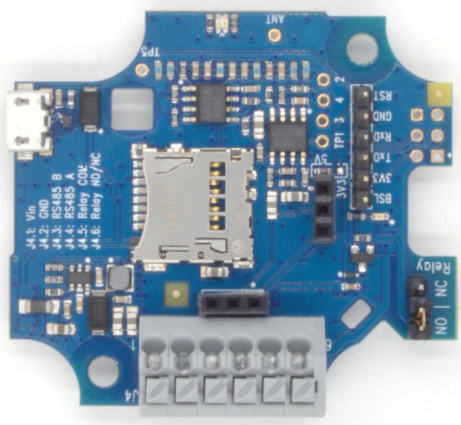
A	58 mm
B	64 mm
C	34 mm
a1	51,4 mm
a2	34 mm
b1	57,4 mm
b2	24 mm
b3	1 mm
b4	1 mm
c1	9 mm
c2	28,5 mm

Gallery

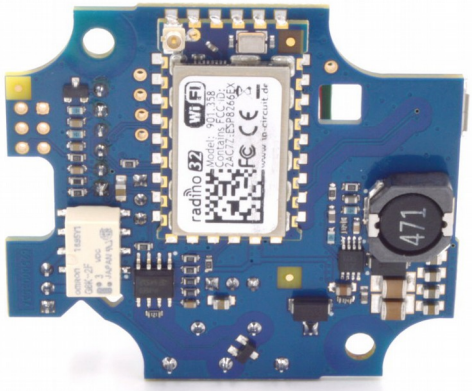
Top view with radar sensor



Top view without radar sensor



Bottom view



radino IP65-Radar with enclosure

Ordering Information

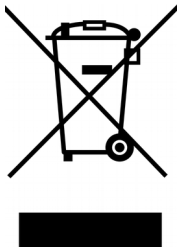
Part	Ordering Code	MOQ	Package
radino IP65-Radar	901.404	1	Single device in anti-static bubble bag

Delivery contents

- radino IP65-Radar with RSM-1650
- IP65 enclosure with fixing material

RoHS / WEEE compliant

WEEE-Reg.-Nr. DE 17225017



Version	Date	Changes	Editor
A	2017/07/03	Initial version	Grünig