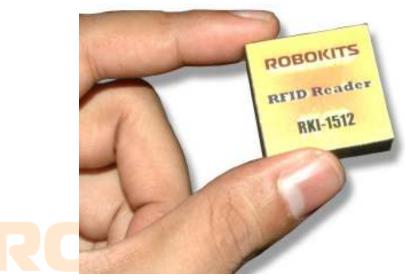
## WWW.ROBOKITS.CO.IN EASY TO USE, VERSATILE ROBOTICS KITS

## ROBOKITS UART/Weigand RFID Reader [RKI-1512]



**Users Manual** 

### **Robokits India**

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This module directly connects to any microcontroller UART or through a RS232 converter to PC. It gives UART/Wiegand26 output. This RFID Reader Module works with any 125 KHz RFID tags.

#### **Specifications**

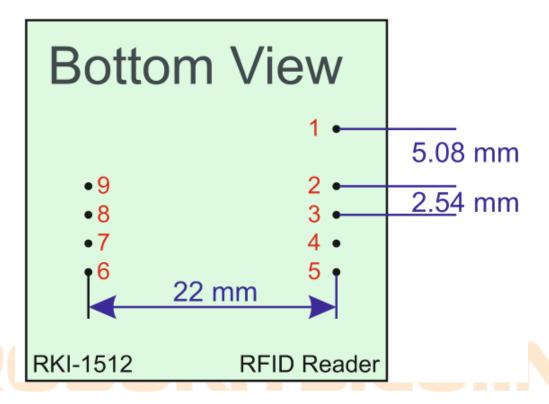
- 5VDC through USB (External 5V supply will boost range of the module)
- Current: <50mA</li>
- Operating Frequency: 125Khz
- Read Distance: 10cm
- Size of RFID reader module: 32mm(length) \* 32mm(width) \* 8mm(height)





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#### **Pin Outs for Reader Module:**



1	VCC	5V
2	GND	GND
3	BEEP	BEEP AND LED
4	NC	NOT CONNECTED
5	NC	NOT CONNECTED
6	SEL	HIGH IS UART,LOW IS WEIGAND
7	TX	UART TX
8	D1	WEIGAND DATA 1 (Optional)
9	D0	WEIGAND DATA 0 (Optional)



#### 1. Wiegand26 (Protocol)

Bit	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Note	P	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	P
	P	E	E	E	E	E	E	E	E	E	E	E	E													
														0	0	0	0	0	0	0	0	0	0	0	0	Р

#### Note:

E: Summed for even parity
O: Summed for odd parity
P: Parity (even or odd)

D: Data code for card: the data will use the last 24 data bits of card

#### 2. RS232 interface format:

10 ASCII DATA (card no.)+ 2 ASCII DATA (XOR result)

E.g. Card number is 4500C5D1E9B8 read from reader then the card number on card will be as below.

45 - Preamble

00C5D1E9 value in Hex = 12964329.

B8 is XOR value for (45 XOR 00 XOR C5 XOR D1 XOR E9)

Hence number on the card is 0012964329.

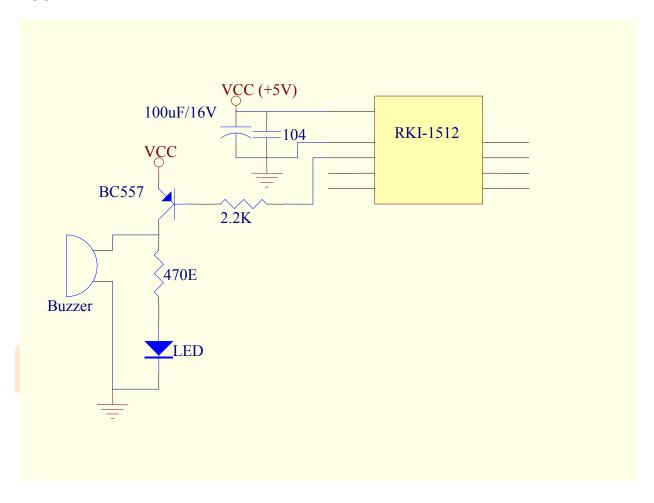
1. Data baud rate: 9600 bps

2. Data bit: 8 bits
3. Parity check: None

4. Stop bit: 1



#### **Application Circuit:**



Note: Connect GND & TX to UART port of MCU or PC.



### **Service and Support**

Service and support for this product are available from Robokits India. The Robokits Web site (http://www.robokits.co.in) maintains current contact information for all Robokits products.

#### **Disclaimer**

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