
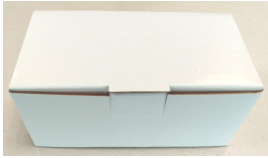



Bluetooth BLE Beacon RS-232 Reader

“Uconnect”, “iBeacon”, “Eddystone” or “Altbeacon”

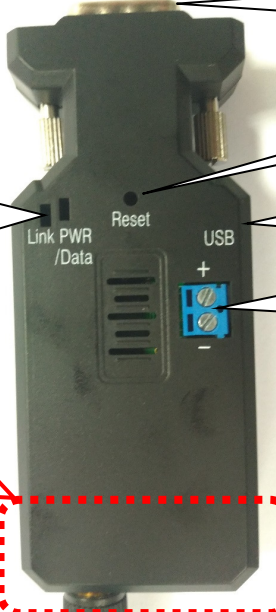
Model: BLE-232R-E

1. Package content:

<p>BLE Beacon RS-232 Reader</p>  <p>White Box Dimension: 11 x 6 x 5 (cm) Total Package Weight: 105 g</p> 	<p>Package Contents:</p> <ul style="list-style-type: none"> ● BLE RS-232 adapter x 1 ● 2 dBi dipole antenna ● A4 User manual x 1 ● Mini USB Cable x 1 
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2. Profile:

2.1 Top view:



DB9 (Female)

Reset to Default

Mini USB (Power)

▲ + (5~27 VDC)
▼ GND

LED:
Link: Blue
PWR/Data: Red

Reset

Link PWR /Data

USB

Radio Frequency area:
Don't cover any metal material or painting.

LED	Description
Blue	Flash when data received
Red	Solid when power on

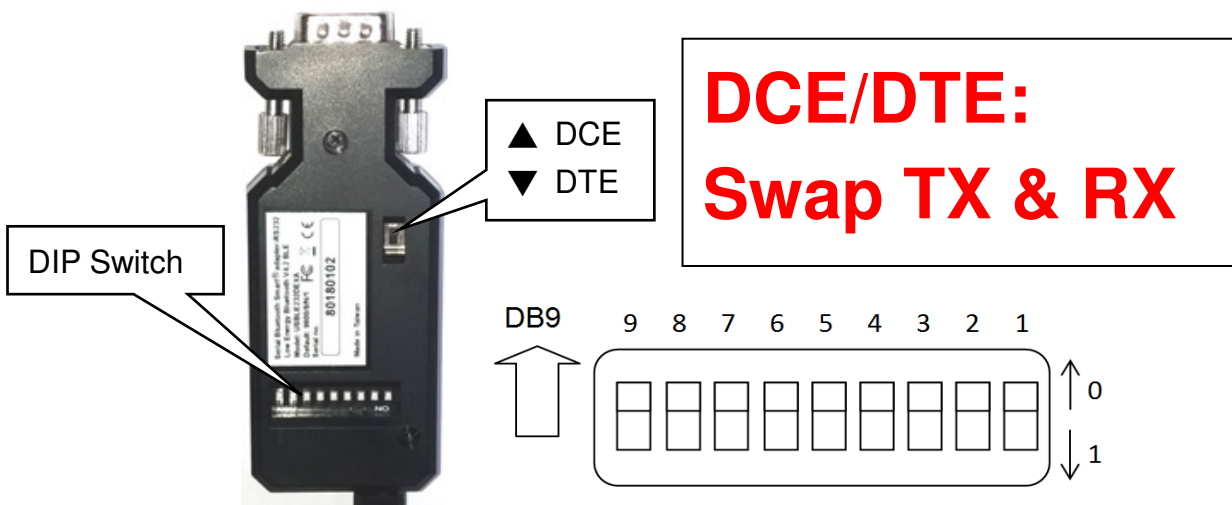
2.2 DB9 connector: (Male)



2: RX 3: TX
5: GND 9: Vin

Pin	Signal	DTE Direction	DCE Direction	Description
1	N/A			
2	RxD	Output	Input	Transmitted data
3	TxD	Input	Output	Received data
4	N/A			
5	GND			Ground
6	N/A			
7	RTS			
8	CTS			
9	Vin			Power Input (5~27 VDC)

2.3 Rear Side:



3. Packet Format:

3.1 All DIP switch is “0” by default. The reader will filter “Uconnect”, “iBeacon”, “Eddystone” or “Altbeacon”.

\$<msg type>,<reader id>,<tag type>,<tag id>,<battery>,<button>,<G-sensor>,<sensor>,<RSSI>#

Field	Description
\$	start of report
msg type	Type of message ex. 0: reserved, 1: Uconnect tag 2: iBeacon, 3: Eddystone, 4: Altbeacon
reader id	6 bytes ID of reader in hex => 12 chars
tag type (*)	type of tag ex. 1: tag w/o g-sensor, 2: tag w/ g-sensor ..
tag id	6 bytes ID of tag in hex => 12 chars

tag batt (*)(**)	batt voltage of tag in 1/10 volt unit
tag button status (*)	button status ex. 0: released, 1: pushed
tag motion status (*)	motion status ex. 0: non-moving, 1: moving
Sensor (*)(***)	Various sensor data (11 bytes)
tag rssi	tag read rssi
#	end of report

Remark

1. (*): The message is "0" for iBeacon, Eddystone and Altbeacon beacon.
2. (**): Eddystone-TLM version 0 include the Tag battery information, 1/10V; The version is none "0" will display "0" in the "Tag batt" column.
3. (***): Tx Power for the iBeacon, altBeacon, Eddystone-UID, Eddystone-URL and Eddystone-EID beacon

Example:

```
$1,00A05053849D,1,00A050172A2C,30,0,0,,-71#
$2,00A05053849D,0,58E72F0CEF88,0,0,0,0,-48#
$3,00A05053849D,0,772BB24ADC36,0,0,0,0,-48#
$4,00A05053849D,0,012AC345EB45,0,0,0,0,-49#
```

3.2 DIP No. 1 is set to "1" (On): Raw packet data

Prefix: "\$"

First column: RSSI value

Raw packet data is between "\$" and "CR"

Suffix: Carriage Return

EX:

```
$-78,0201061BFF5900AABC0100A050172A2C1E000000000000000000000000000000BB
$-83,1EFF06000109200073C68487B4DFB227B7546E97078954811C4EB1E40DC1DF
```

3.3 Default: All pin is "0", Baud rate 9,600 bps., 8 Data bits, None parity, 1 Stop bit.

3.4 DIP No. 9 is set to "1" (On): The baud rate is 115,200 bps,

4. Power supply:

4.1 Voltage: 5~27 VDC, **Don't exceed the limit.**

4.2 There're 3 ways to power the adapter: Mini USB, Terminal Block and pin9 of DB9, please choose one. **Don't power the adapter by more than one source.**

4.3 The mini USB cable is inside the standard package.

5. Wireless or Wire communication integration: (option, please contact the supplier)

5.1 WiFi RS-232 (Model: WA-232E)



5.2 Ethernet RS-232 (Model: EA-232)



5.3 Bluetooth V2.1 SPP RS-232 (Model: BT-232B or BT-232B-E)



5.4 LoRa or Wi-Sun RS-232 converter (Model: LORA-232, Wi-Sun-232)



The reader will connect with one of the above communication to bridge the tag data to the controller.

6. Customization: please contact the supplier

6.1 Tag format

6.2 Packet format of the reader

6.3 Reader bridge for communication