RB301 Datasheet

Date: 2024-5-14

Part #	Description
RB301	The RB301 is a fashionable card beacon with BLE5.0 and a 100m broadcasting transmission range, mostly designed for personnel management, workflow optimization and indoor positioning, etc; also, patients in hospitals or staff in the workplace.

INTRODUCTION

The RB301 is mostly used for asset tracking and location, personnel tracking, activity monitoring, inventory tracking, etc. The user can configure the RB301 card beacon via BeaconSET+ App.

FEATURE

- Advertising iBeacon & Eddystone & Sensor data
- Bluetooth® 5.0 chipset nRF52 series
- The max. 100 meters advertising distance
- Waterproof IP65 housing with key-chainhole

APPLICATION

- Asset tracking and location
- Personnel tracking
- Activity monitoring
- Inventory tracking

ACCESSORY

- Double-sided adhesive

ACTIVATE RB301

- Pressing “power button” and keeping on 3seconds;
- The LED lights on 5 seconds then off, the device be activated on.

CONFIGURATION TOOL

- BeaconSET+ (iOS & Android), the RB301 can be turned off only by app BeaconSET+.

FIRMWARE UPGRADE

1. J-LINK Programmer Kit;
2. Programming ports definition;
3. OTA Available

ELECTRONIC PARAMETER

Item	Value	Remarks
Case Color	White	Other colors can be customized
Battery Model	3.0V, 1pc, 800mAh	Li-Poly, non-rechargeable & non-replaceable
Operation Voltage	1.8-3.9V	DC
Operation Temperature	-20~60℃	Null
Transmission Current	7.4mAH (peak current)	Tested at 0dBm transmission power
Transmission Range	100 meters	Maximum
Antenna	50ohm	On board / PCB Antenna
Size	85.5*54*4.5mm	Null

PARAMETER SETTING

Each RB301 card beacon has been pre-configured in the factory before the shipment. Here below is given the main parameters and default settings.

Type	Item	Default Settings
iBeacon	UUID (16 bytes)	E2C56DB5-DFFB-48D2-B060-D0F5A71096E0 (Proximity)
	Major (2 bytes)	0
	Minor (2 bytes)	0
	Measured Power	-59dBm9（0xC5)
	Tx Power	0dBm
	Interval(ms)	900ms
UID (On)	Instance ID	Random
	Namespace ID	Random
	Measured Power	-24dBm(0xE8)
	Tx Power	0dBm
	Interval(ms)	2000ms
URL (On)	URL	http://www.minew.com
	Measured Power	-24dBm(0xE8)
	Tx Power	0dBm
	Interval(ms)	2000ms
TLM (On)	Electricity mV	By default
	Boot time	By default
	PDU packets	By default
	Measured power	-24dBm(0xE8)

	Tx power	0dBm
	Interval(ms)	4000ms
INFO (On)	Device name	RB301
	Electricity	By default
	MAC address	Factory setting
	Measured power	-24dBm(0xE8)
	Tx power	-8dBm
	Interval(ms)	4000ms
Extra Function	Password	minew123(configurable)
	Connectable	Yes(it is configuration mode)
	Reset factory	available
	Update firmware	available
Sensor (Off)	Sensor Data	Switched Off by default; Switched on by manual; ACC available

COMPATIBILITY

Supporting device&system	**Module of Supporting device**
BLE	BLE4.2 and above
ios10.0 and above	iPhone6/6Plus/6S/6SPlus, iPhone7/7Plus iPhone8/8Plus, iPhonex/xr/xs/xs Max iPhone11/11 pro/11 pro Max iPad mini/mini2/4/Air/pro, etc.
Android4.3 and above	Samsung Xiaomi ,Huawei ,OnePlus, Vivo, OPPO, etc.

PACKING INFORMATION

Details	Inner Box(Battery included)	Outer Box(Battery included)
Quantity(C10)	40pcs / box	400pcs / carton
Net Weight	750g	7.5Kg
Gross Weight	850g	9.0Kg
Size	30.5 x 11 x 7.2 cm	32 x 23.5 x 40 cm

DECLARATION

The contents of this data sheet are subject to change without prior notice for further improvement. Minew team reserves the right to explain all the terms of this data sheet.

CONTACT

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<END>

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

This device complies with Innovation, Science, and Economic Development Canad licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and

(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d' Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil nedoit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment.

L'appareil est conforme aux limites d'exposition aux rayonnements spécifiées par la FCC/ISED pour les environnements non contrôlés.