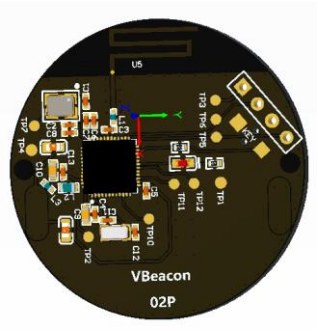
Vibeacon
VTM

Bluetooth Low Energy proximity-beacon

Data sheet v. 1.0



ViBeacon 02P is a small device that transmits a Bluetooth signal at regular intervals. This signal is broadcast in a certain format, a communication protocol that describes the string of characters and numbers that make up the signal. It supports advertising of multiple frames with iBeacon, Eddystone format. With its small form factor, low power, high economic Bluetooth radio, ViBeacon 02P can easily be added in your system and help to promote the design process.

Advertising	
configurable for the following frame types: iBeacon	
TX power	up to 4dBm Programmable
Advertising interval	Configurable. default 1s.
Global configuration options	connectable mode, programmable major minor tx power time period, change password
Device specifications	
Electrical specifications	
Core module	nRF 52810
MCU core	ARM Cortex-M
Current consumption	Radio TX: 4.6mA (@ 0dBm) Radio RX: 4.6 mA Sleep mode: 2 uA
Radio specifications	
Standard	Bluetooth 5. 0 (Bluetooth Low Energy or Bluetooth Smart)
Frequency band	2.402 to 2.480 GHz (according Bluetooth 5.0 specifications, worldwide ISM band)
Advertising channels	CH37 (2.402 GHz), CH38 (2.426 GHz), CH39 (2.480 GHz) (according Bluetooth 5.0 specifications)
Channel spacing	2 MHz (according Bluetooth 5.0 specifications)

Address: Rm 508, 1888 YiShan Road Shanghai
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TX power	Conducted: +4 dBm (max) EIRP (Equivalent Isotropic Radiated Power): +7 dBm (max)
Antenna	
Type	Mono Pole
Gain	3dB (max.)
Radiation diagram	Omnidirectional
Power	
Power supply	3V
Type	CR2450
Expected life	Upon system.
Mechanical specifications	
Material	PCB Module
Size	34 x 34 x 8 mm
Opening	SMD
Protection	Upon system
Flammability	UL 94 HB
Environmental specifications	
Operating temperature	-40˚C to +85˚C
Storage temperature	-40˚C to +85˚C
Certifications	

Expected battery life-time (in months, 400mah, module only)						
	Advertising interval					
TX power	100 msec	300 msec	500 msec	700 msec	1000 msec	5000 msec
0 dBm	2.5	7	10	12	15	25
-8 dBm	3	7.5	11	13	16	26
-20 dBm	3	8	11.5	14	17	27

Expected battery life-time is estimated assuming nominal battery capacity, self-discharge and ambient operating temperature.

Batteries from different manufacturers can have different operating lives.

Vtrump reserves the right to change product specifications at any time without prior notice.

iBeacon is a trademark of Apple Inc.,

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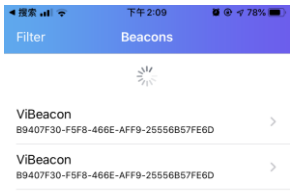
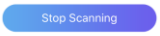
Install & how to use

Install battery：
Insert the CR2450 into battery slot with the corrected direction.

How to configuration

1、 downlodad and install configuration app.
2、 Search Vibeacon device.





3、 Selected device to connected

4、 Input password to access device
5、 Setup parameters.

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FCC Regulatory notices

Modification statement

VTrump Tech (Shanghai) Co., Ltd has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

Interference statement

This device complies with Part 15 of the FCC Rules and Industry Canada 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.

RF exposure

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. The antenna should be installed and operated with minimum distance of 20 cm between the radiator and your body. Antenna gain must be below 3 dBi.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The host end product must include a user manual that clearly defines operating requirements and conditions that must be observed to ensure compliance with current FCC RF exposure guidelines.

For portable devices, in addition to above, a separate approval is required to satisfy the SAR requirements of FCC Part 2.1093.

If the device is used for other equipment that separate approval is required for all other operating configurations, including portable configurations with respect to 2.1093 and different antenna configurations.

FCC Class B digital device notice

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.

Labelling Requirements for the Host device

The host device shall be properly labelled to identify the modules within the host device. The certification label of the module shall be clearly visible at all times when installed in the host device, otherwise the host device must be labelled to display the FCC ID and ISED of the module, preceded by the words "Contains transmitter module", or the word "Contains", or similar wording expressing the same meaning, as follows:

Model: VTM
Contains FCC ID：2ARV3-VTM

The host OEM user manual must also contain clear instructions on how end users canfind and/or access the module and the FCC ID and ISED.

Model: VTM
Contains FCC ID：2ARV3-VTM

OEM Statement

a. The module manufacturer must show how compliance can be demonstrated only for a specific host or hosts

b. The module manufacturer must limit the applicable operating conditions in which the transmitter will be used, and

c. The module manufacturer must disclose that only the module grantee can make the test evaluation that the module is compliant in the host. When the module grantee either refuses to make this evaluation, or does not think it is necessary, the module certification is rendered invalid for use in the host, and the host manufacturer has no choice other than to use a different module, or take responsibility (§ 2.929) and obtain a new FCC ID for the product.

d. The module manufacturer must provide the host manufacturer with the following requirements:

i. The host manufacturer is responsible for additional testing to verify compliance as a composite system. When testing the host device for compliance with Part 15 Subpart B, the host manufacturer is required to show compliance with Part 15 Subpart B while the transmitter module(s) are installed and operating. The modules should be transmitting and the evaluation should confirm that the module’s intentional emissions are compliant (i.e. fundamental and out of band emissions).