C&C iBeacon Specification

Model: CNC-2

1. Description

The C&C Beacon module is built-in a battery holder and a coin battery, it can work as alone system.

2. Features

- Built-in iBeacon firmware
- Built-in a coin battery
- Bluetooth low energy technology compatible
- Excellent link budget (up to 97dB)
- Enable long range applications
- Accurate digital RSSI
- Compatible with CE and FCC regulation
- High performance and low power 8051 core MCU
- AES security coprocessor

3. iBeacon parameter default setting

-UUID: E2C56DB5DFFB48D2B060D0F5A71096E0
-Major and minor identifier: 0x0001, 0x0001
-Pairing password: 0x123456

4. Electronic Parameters

Item	**Test Data**	**Remarks**
Battery model	CR2032	Coin battery, 3.0Vdc, 1pc
Operation Voltage	2.0-3.6V	DC
Operation Frequency	2402-2480MHz	
Frequency Error	+/- 20KHz	-
Modulation	Q-QPSK	-
Standby current	12μA	-
Output power	0 dBm	Programmable
Receiving Sensitivity	-93 dBm	High gain mode
Transmission distance	15meters	BER<0.1%, Open space
Antenna	50 ohm	Chip Antenna
Size	Φ28mm	-
Casing Size	Φ32mmx12mm	Material: ABS
Standard Advertising Data	UUID、Major、Minor、TX Power Level	
Battery Level Advertising	0%~100%	
Configurable	UUID、Major、Minor、advertising interval time	

5. Battery Lifetime Estimates

The popular CR2032 coin-cell battery lasts for almost 9 months beaconing both packets with a 2 second interval.

6. Document History

Revision	Date	Description / Changes
1.0	20/04/2015	Initial release
1.1	18/06/2015	

7. Important Notice

C&C reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete.

8. FCC STATEMENT :

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

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.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.