Datasheet V1.0

# Beacon / iBeacon / MiniBeacon

## **Datasheet V1.0**

Model	Description		
D15N-W	Signal white (RAL9003) casing, CE&FCC certified module, includes 1pc 85mAh CR2016 coin battery, RoHS		

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The UFO MiniBeacon D15N is a very popular and modern iBeacon with ARM core chipset nRF51822 and leverage BLE 4.0 technology; it has a nice design case, accurate hardware and robust firmware. It is designed for the commercial advertising and indoor location-based service.

Minew Beacons broadcast 2.4GHz radio signals at regular and adjustable intervals. MiniBeacon can be heard and interpreted by iOS and Android BLE-enabled devices that are equipped with many mobile apps.

### **FEATURES**

- Programmed MiniBeacon standard firmware
- Included 1pc CR2025 coin battery
- The max. 90 meters advertising distance
- Ultra-low power consumption chipset nRF51822 with ARM core
- Easy to print the logo on the center of top case;



D15N UFO MiniBeacon Image 1

### **CERTIFICATIONS**

- iBeacon MFi License (iBC-14-00582)
- FCC Regulation (FCC Part 15.)
- CE Regulations (Included EN300328/301489/60950/62479)

### **SPECIFICATION**

### Compatibility

- Supported iOS 7.0+ and Android 4.3+ system;
- Compatible with Apple iBeacon<sup>TM</sup> standard;
- Compatible with all Bluetooth 4.0 (BLE) devices;

### Long Battery Lifetime and Battery Level

- 5 months, with the default settings;
- Easy to get the real-time battery level notification;

### Soft-reboot

- Reboot the device via command without any tools;

### **OTA** and J-Link

- Supported upgrade via Over-The-Air;
- Reserved J-Link port on the board for programming;

### **Connection Mode**

- Advertising mode, non-connectable;
- Configuration mode, connectable;

### **Configurable Parameters**

- UUID, Major, Minor, Device Name, Password etc.
- Special Configuration APP;

### **Transmission Power Levels**

- 8 adjustable levels, range from 0 to 7
- Transmission power range: -30dBm to +4dBm;

### Long Range

- The max. Range 100 meters in the open space;
- The range depends on the physical environment;

### Security

- 8 characters password (Lock/Unlock parameters);
- Broadcast the encrypted data if needed;
- AES HW encryption

### Accessories

- Key-chain;
- Neck-string;

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### **TURN ON/OFF D15N**

- 1) Please press the centre of D15N and keep holding 3 seconds when you heard a "b" switching sound;
- 2) Then Blue LED lights on 5 seconds then off, the beacon D15N starts broadcasting;
- 3) If the Blue LED flashes 5 times then off, the beacon D15N stops broadcasting;

### **CONFIGURABLE PARAMETERS**

Characteristic	Item	Default Settings	
0xFFF1	UUID	E2C56DB5-DFFB-48D2-B060-D0F5A71096E0 (Proximity)	
0xFFF2	Major	0	
0xFFF3	Minor	0	
0xFFF4	Measured Power	-59 (0xC5)	
0xFFF5	Transmission Power	3 (-12dBm)	
0xFFF6	Change Password	minew123 (Must be 8 characters)	
0xFFF7	Broadcasting Interval	9(900mS)	
0xFFF8	Serial ID	Random (Unique serial ID for beacon)	
0xFFF9	iBeacon Name	MiniBeacon_ (the maximum 12 characters)	
0xFFFE	Connection Mode	0 (connectable, configuration mode)	
0xFFFF	Soft Reboot	minew123 (it is same as the value of Change Password)	

### **ELECTRONIC PARAMETERS**

Item	Value	Remarks	
Case Color	white	Other colors can be customized	
Battery Model	1 x CR2025	1pc CR2025 coin battery, 85mAh, 3.0V	
Operation Voltage	1.8-3.6V	DC	
Transmission Circuit	10.5mA (Max.)	Tested at 0dBm transmission power	
Transmission Range	30 meters	Maximum	
Antenna	50ohm	On board / PCB Antenna	
Accessories	Null	Null	
Net Weight	7.0g	With battery but without package	
Size	Ø35 x 8.2 mm	Null	

### **TECHNICAL SUPPORT**

Item	Version	File Name	Updated Date
Datasheet	V1.0	D15N_MiniBeacon Datasheet_1.0.pdf	25 <sup>th</sup> March, 2016
Instruction	V2.03	Instructions_MiniBeacon_V2.03.pdf	25 <sup>th</sup> May, 2015
SDK	V1.0	Android Reference Source Code;	28 <sup>th</sup> February, 2015
JUK		iOS Reference Source Code;	26 February, 2015
APP Tools	V2.0	BeaconSET(iOS), BeaconCFG(Android)	3 <sup>rd</sup> November, 2015