# **MinewTechnologies**

DatasheetV1.0

# DigitalBroadcastingDevice Datasheet V1.0

# **FCC Statement**

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 isno 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 part 15 of the FCC Rules. Operation is subject to the following twoconditions:(1) This device may not cause harmful interference, and (2) this device must acceptany interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

#### - English:

This device complies with 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.

#### - French:

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit 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.

Model	Description		
D52	White casing, CE certified module, includes 1pc CR2032 coin battery, RoHS		

The Digital Broadcasting Device D52 is a modern iBeacon with ARM core chipset nRF52832 and leverage BLE 5.0 technology; it has a cone shape case, accurate hardware and robust firmware. It is designed for the commercial advertising and indoor location-based service.

The Digital Broadcasting Device broadcasts 2.4GHz radio signals at regular and adjustable intervals. The Digital Broadcasting Device can be heard and interpreted by iOS and Android BLE-enabled devices that are equipped with many mobile apps.

This device complies with 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.

#### **FEATURES**

- Programmed standard firmware
- Included 1pc CR2032 coin battery
- The max. 50 meters advertising distance
- Ultra-low power consumption chipset nRF52832 with ARM core
- Easy to print the logo on the center of top case;



D52.1 Digital Broadcasting Device

# Compatibility

- Supported iOS 7.0+ and Android 4.3+ system;
- Compatible with Apple iBeacon<sup>™</sup> standard;
- Compatible with all Bluetooth 5.0 (BLE) devices;

#### Long Battery Lifetime and Battery Level

- 12 months, with the default settings;
- LED will be flashing when battery low;
- 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 50 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

#### Mounting

- 3M branded adhesive for direct mounting to wall;

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# **ELECTRONIC PARAMETERS**

Item	Value	Remarks
Case Color	white	
Battery Model	1 x CR2032	1pc CR2032 coin battery, 3.0V
Operation Voltage	1.8-3.6V	DC
Transmission Circuit	10.5mA (Max.)	Tested at 0dBm transmission power
Transmission Range	50 meters	Maximum
Antenna	50ohm	On board / PCB Antenna
Accessories	Double adhesive	1pc, high-strength, 3M brand;
Net Weight	18.0g	With battery
Size	Ø30x 8.3 mm	Null

# **APPDENDIX**

- 1. J-LINK Programmer Kit;
- 2. Over-the-Air Function;

# DECLARATION

The contents of this datasheet are subject to change without prior notice for further improvement. Minew team reserves the right to explain all the terms of this datasheet. **<END>**