QS-WPS
Waterproof Broadcasting Device
Datasheet

Part #	Description
QS-WPS	QS-WPS is a waterproof broadcasting device with BLE 5.0, SOS button, and indoor positioning. Users can push the SOS button when they need help. Also, it can enable employees to check-in-&out in the office for management optimization with advanced NFC tech.

INTRODUCTION

QS-WPS is a new generation beacon with push-button for hospital patients, personnel positioning, and emergency call. It is equipped with Bluetooth® 5.0 hardware platform based on nRF52 chip, advertising iBeacon, Eddystone (UID, URL, TLM), and Accelerometer sensor simultaneously. The user can configure the device beacon via BeaconSET+ App as well.

FEATURE

- Advertise i Beacon & Eddystone
- 3-axis sensor data(Only for NRF 52832)
- Bluetooth® 5.0 chipset
- 1 pc CR series replaceable coin battery
- A push-button on the beacon
- IP67 waterproof grade, dust-proof, shock-proof
- Detachable wristband
- NFC available

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APPLICATION

- Activity monitoring
- Hospital management
- Indoor location
- Personnel tracking

ACTIVATE & STOP QS-WPS

- Press the button of QS-WPS for 5s, the LED lights on 3s then off, the device is activated on;
- Press the button of QS-WPS for 5s, the LED flashes 5 times then off, the device is turned off.

CONFIGURATION TOOL

- BeaconSET+ (iOS & Android);
- The QS-WPS waterproof broadcasting device can be turned off by app BeaconSET+;

ELECTRONIC PARAMETER

Item	Value	Remarks
Case Color	White	Other colors can be customized
Battery Model	1 x CR series	1pc CR series button battery, 220mAh, 3.0V
Operation Voltage	1.8-3.9V	DC
Transmission Circuit	5.3mA (Max.)	Tested at 0d Bm transmission power
Transmission Range	90 meters	Maximum
Antenna	50ohm	On board / PCB Antenna
Net Weight	12g	With battery
Size	Φ35.9*11mm	Main body

CONFIGURABLE PARAMETERS

Each QS-WPS device has been pre-configured in the factory before the shipment. Here below is given the main parameters and default settings.

BeaconPlus Firmware V1

Type	Item	Default Settings
iBeacon	UUID (16 bytes)	E2C56DB5- DFFB-48D2- B060- D0F5A71096E0 (Proximity)
	Major (2 bytes)	0
	Minor (2 bytes)	0
	Measured Power	-59d Bm9 （0xC5)
	Tx Power	0d Bm
	Interval(ms)	900ms
UID (On)	Instance ID	Random
	Namespace ID	Random
	Measured Power	-24d Bm(0xE8)
	Tx Power	0dBm
	Interval(ms)	2000ms
URL (On)	URL	http://www.minew.com
	Measured Power	-24d Bm(0xE8)
	Tx Power	0dBm
	Interval(ms)	2000ms
TLM (On)	Electricity mV	By default
	Boot time	By default
	PDU packets	By default
	Measured power	-24d Bm(0xE8)
	Tx power	0dBm
	Interval(ms)	4000ms

INFO (On)	Device name	QS-WPS
	Electricity	By default
	MAC address	Factory setting
	Measured power	-24d Bm(0xE8)
	Tx power	-8dBm
	Interval(ms)	4000ms
Extra Function	Password	minew123(configurable)
	Connectable	Yes(it is configuration mode)
	Reset factory	available
	Update firmware	available
ACC Sensor	X-axis	1. The value is decided by the real status: stable or move;
	Y-axis	2. Only act on the beacon with the accelerometer sensors inside.
	Z-axis	

BeaconPlus Firmware V2

Type	Item	Default Settings
iBeacon （Trigger once）	UUID(16bytes)	FDA50693-A4E2-4FB1-AFCF-C6EB07647825
	Major(2bytes)	10001 (0-65535, configurable)
	Minor(2bytes)	19641 (0-65535, configurable)
	Measured power	-59d Bm(0xC5)
	Tx power	0d Bm (-40~+4d Bm, configurable)
	Interval(ms)	500ms (100ms~10s,configurable)
UID （Trigger twice）	Instance ID	Random
	Namespace ID	Random
	Measured power	-24d Bm(0xE8)
	Tx power	0d Bm (-40~+4d Bm, configurable)
	Interval(ms)	2000ms (100ms~10s, configurable)
URL （Trigger three-times）	URL	http://www.minewtech.com/
	Measured power	-24d Bm(0xE8)
	Tx power	0d Bm (-40~+4d Bm, configurable)
	Interval(ms)	2000ms (100ms~10s, configurable)

TLM（On）	Measured power	-24d Bm(0xE8)
	Tx power	0d Bm (-40~+4d Bm, configurable)
	Interval(ms)	4000ms (100ms~10s, configurable)
INFO（On）	Measured power	-24d Bm(0xE8)
	Tx power	-8dBm (-40~+4d Bm, configurable)
	Interval(ms)	4000ms (100ms~10s, configurable)

COMPATIBILITY

Supporting device& system	Module of Supporting device
BLE	BLE4.2 and above
iOS7.0 and above	i Phone4S, i Phone5/5C/5S iPhone6/6Plus/6S/6SPlus, iPhone7/7Plus 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(QS-WPS)	1pcs / box	96pcs / carton
Net Weight	12g	1152g
Gross Weight	48.5g	5.1Kg
Size	180x 100 x 12 cm	32 x 23.5 x 40 cm

TRIGGER OPERATION

NRF52810 Trigger Operation：
1．Click the button to broadcast i Beacon frame for 60s
2．Double click the button to broadcast URL frame for 60s
3．Press the key three times to broadcast UID frame for 60s

NRF52832 Trigger Operation：
1．Single Clicking is not supported
2．By default, double-click and triple click triggers are not available. If they are needed, access to BeaconSet + for setting.

FCC WARNING

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