

WiSeConnect BLE Asset Tag Hardware and Technical Specification

> Preliminary Version (Rev 1.1) Issued: 11/04/2016

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Revision History

Rev No	Date	Notes	
Rev 1.0	12/30/2015	Initial Release	
Rev1.1	11/04/2016	Block diagram added.	



General Information



Figure 1. WiSeConnect BLE Asset Tag

Operational Description

The WiSeMesh BLE Asset Tag is a discrete, low-power BLE Mesh device that can be easily applied throughout various environments to monitor and track any mobile asset when used in conjunction with the WiSeMesh network. When mounted on a mobile or fixed asset these tags communicate with the WiseMesh Cloud to identify time and location data in real-time.





Block Diagram



Key Features

Location Tracking and Time Stamping Capability

The asset tag provides real-time location and time logging to any asset within a commercial environment.

Configurable

Over the air configurable for security, ID as well as connection and communication frequency.

Dual Communication and Security

Each WiSe Mesh BLE Tag can send and receive data in real time, this allows for ease of application updates and setting new rules to a specific WiSe Mesh BLE Tag for connection and communication frequency. Each Tag is AES 128 bit encrypted for device and network security.

Ease of Installation

The WiSe Mesh BLE Tag can be easily deployed on an asset throughout any facility by local maintenance personnel or staff. It is easy to provision tags to the WiSe Connect tracking platform and monitor battery levels.

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Compact Design and Tamper Resistant

The Wise Mesh BLE tag sends alarm notification to the WiSe Cloud any time there is an unauthorized removal or tamper of the tag.

Specifications

Radio Frequency (BLE 4.0) 2.4-2.5 Ghz

Wireless Standards Supported Bluetooth 4.1 stack

Device Security AES 128k Encrypted, With 3 Level Pairing Keys (Network, App, GUID)

Antenna 50 Ohm On Board Antenna

Power 3v(1.5 years) Battery included (CR2032)

Dimensions 65 X 29 X 14mm

Operating Conditions Temp 0-50°C



User Manual Pairing a Tag



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TABLE OF CONTENTS

Table of Contents	. 3
Table of figures	. 4
Prerequisites	. 4
Hardware Versions Used	. 5
Device Commissioning	. 5

Figure 1 "Add device" option	5
Figure 2 Filter (optional)	6
Figure 3 Scan for devices	6
Figure 4 "Test" option	7
Figure 5 Pair the device	7
Figure 6 Paired device under default group	8

PREREQUISITES

• App should be in Skip login mode.

HARDWARE VERSIONS USED

Sl#	Particulars	Version
1	Арр	iOS SDK Appstore build V_3.0.0_B_1
2	Wise Beacon	1.3.27

DEVICE COMMISSIONING .

a) Click on "(+)" and select "Add Device" from the main menu options.





b) Click on filter icon if the user wants to filter out a particular type of device that needs to be scanned for in the presence of multiple device types.(OPTIONAL)

№ SIM ຈ Back	12:39 рм Provisioning	g ▼ [♥] ★ ■ Stop
\otimes	Filter	\bigcirc
		-100 dBm
		DESC
Q 🖻	evice Name	
		- 1
DashBoard	Beacon Too	s Settings

Figure 2 Filter (optional)

c) Click on "Scan"

No SIM 🔶	2:50 PM	८ ४ ₿ 🕞
Back	Provisionin	g Scan
P Int	Q >	Ó
DashBoard	Beacon Too	ls Settings

Figure 3 Scan for devices

d) When Wise Beacon device appears in the scanned list, swipe leftwards on the device name and click "Test" button to test its connection.

No SIM 중 Back	3:14 Provis	ioning	✓ * ■ Stop
	Wise RGB	3WC Bulb 00000014ccb016e3	Far -79 dBm
	Wise Dim	mable Bul	b Far ac3 -91 dBm
\bigcirc	Wise Bea	ICON 0000000fb1a8407a5	Far -100 dBm
P Int		×	0
DashBoard	Beacon	IOOIS	Settings

Figure 4 "Test" option

e) Click on "Pair" button to get the device paired.



Figure 5 Pair the device

f) Paired devices can be seen under Default group in the dashboard.



Figure 6 Paired device under default group

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

Changes or modifications not expressly approved by the party responsible for compliance

could void the user's authority to operate the equipment. 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.