RAK2171 WisNode TrackIt Datasheet

Overview



Figure 1: RAK2171 WisNode TrackIt

Description

RAK2171 WisNode TrackIt is RAKwireless' latest LoRaWAN GPS tracking device. It comes in a small form factor with rechargeable battery and tracking and configuration application, available for iOS and Android devices.

RAK2171 supports multiple working modes and notification options. When used with RAK WisGate Edge gateways and in P2P mode, you can monitor your tracker on the application map, create geofences, and receive SOS and movement notifications. You can also configure the WisNode TrackIt to work with any third-party LoRaWAN network using the TrackIt application as a configuration tool.

Features

- · MT2523 with built-in Bluetooth and GPS
- SX1262 LoRa chip
- Built-in accelerometer
- Built-in battery: 400 mAh
- · Charger with a magnetic plate
- Small size: 42x42x18 mm
- Low weight: 25 g
- Operating temperature: -20 °C to +60 °C
- IP65 rating
- · Android and iOS application for easy management, configuration, and location tracking

Specifications

Overview

Board Overview



Figure 2: RAK2171 WisNode TrackIt Dimensions

Parameter	Value
Dimensions	42x42x18 mm
Weight	25 g
Operating temperature	-20 °C to +60 °C
Battery capacity	400 mAh
Color	Tracker: White / Dark Grey Charger: Black
Charger	5-pin Magnetic Plate USB Type-A Cable Length: 50 cm

Hardware

The hardware specification is categorized into five parts. It covers the interfacing and the standard values and requirements, such as the RF, electrical, and environmental of the RAK2171 WisNode TrackIt.

Interfaces



Figure 3: RAK2171 WisNode TrackIt Interfaces

Buttons and LED

• Function Button - Used for LED signalization.

LED color	Meaning
Blue breathing	Charging
Green steady □	Battery is full
Red signal blink	Low battery (20% and down)

• Power/SOS Button - Used for powering on/off the device and sending SOS signals.

Press combination	Function	LED color
Press and hold for 3 seconds	Power on/off	Red light for 3 seconds
5 consecutively clicks	Sends SOS message to the app	Red flash on
5 consecutively clicks again	Cancel SOS message	Red flash off

• Charging Interface - The device has 3 pins charging port on the back that connects to the magnetic charging plate.



Use the original charging plate and cable only.

RF Characteristics

Parameter	Value
Positioning	GPS, GLONASS
Communication	Bluetooth V4.2

Antennas

The RAK2172 WisNode TrackIt has built-in LoRaWAN, GPS, and Bluetooth antennas.

Electrical Characteristics

Parameter	Value
Battery Type	Lithium
Battery Capacity	400 mAh
Charging	5 V, 1 A

Environmental Requirements

Parameter	Value
Charging temperature	+10 °C to +45 °C
Operating temperature	-20 °C to +60 °C

Software

Firmware

Mobile Application

- For Android
- For iOS

Certification



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