

Bluetooth Sensor Tag

TEMPERATURE BLE TAG



GATT AND ADVERTISING

Full support for specifications Eddystone Configuration GATT Service by Google

Up to 4 slots configurable for Eddy frame types: UID, URL, TLM, EID

Up to 4 slots configurable for the following frame types: iBeacon, Quappa (emulation mode), Sensors

TX Power	-40, -20 to 4dBm (with 4 dB steps). Programmable time period
Advertising Interval	0.1 to 60 secs. Programmable for each slot
Global Configuration Options	Non-Connectable Mode, Anonymous Mode, Programmable Time Period, Locked / Unlocked Mode, Change Password
Firmware Update	OTA (Over-the-Air) Firmware Update

ELECTRICAL SPECIFICATIONS

Core Module	Nordic nRF52832 SoC (MCU and Radio Transceiver)
MCU Core	ARM Cortex-M4 32-bit CPU
Current Consumption (25°C)	Radio TX: 7.1 mA (0 dBm TX) Radio RX: 6.5 mA Idle Mode: 3 µA Idle Mode with Accelerometer ON: 7 µA

RADIO SPECIFICATIONS

Standard	Bluetooth 4.2, Bluetooth Low Energy (compatible with BLE 5.x)
Frequency Band	2.402 to 2.480 GHz (According to Bluetooth 4.0 Specification)
Advertising Channels	CH37 (2.402 GHz), CH38 (2.426 GHz), CH39 (2.480 GHz) (according to Bluetooth 4.0 specifications)
Channel Spacing	2 MHz (according to Bluetooth 4.0 specifications)
TX Power	Conducted +4 dBm (max) EIRP (Equivalent Isotropic Radiated Power): +6 dBm (max)

FEATURES

- Suitable for outdoor and industrial applications
- Based on Nordic nRF52832
- Simultaneous support of iBeacon and Eddystone
- 3-axis accelerometer for motion detection
- Temperature and Humidity sensors
- 2x LEDs for signaling
- Enclosure with flanges for flexible fastening
- Powered by replaceable CR2477 lithium battery

TECHNICAL DATA

ANTENNA

Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation Diagram	Omnidirectional

POWER

Power Supply	Battery
Replaceable	Yes
Type	CR2477 (3V, lithium)
Model	Panasonic Industrial CR2477 (typical capacity 1000 mAh @ 25°C)

SENSORS AND INTERFACES

Sensors	3-axis MEMS linear accelerometer Temperature Humidity
Interfaces	2x LEDs (yellow, red)
Temperature	$\pm 0.2^{\circ}\text{C}$ (0-70°C), $\pm 0.3^{\circ}\text{C}$ (-40-100°C)
Humidity	3%RH (RH=0 to 85%RH), 4%RH (RH=85 to 95%RH)

MECHANICAL SPECIFICATIONS

Material	ABS plastic
Color	White
Size	77 x 46 x 16 mm (including flanges)
Weight	27 gr
Fastening	Screws (max. M3.5), cable-ties
Opening	Back lid with four screws
Protection	-
Flammability	UL 94 HB

APPLICABLE STANDARDS

Operating Temperature	-20°C to +60°C (battery operating life sharply decreases under 0°C)
Storage Temperature	+10°C to +30°C (with battery), -40°C to +85°C (without battery)

CERTIFICATIONS

CE, FCC

ORDER CODES

VERSIONEN	ORDER CODES
Temperature BLE Tag	IOT-BT-BL-TE-5401