

MicroTag Wirepas

Wirepas Mesh 2.4GHz compact asset tag

Data sheet



Key features

- Suitable for small asset location and tracking
- Based on Nordic nRF52832
- Firmware based on Wirepas libraries
- Compact size with reduced thickness
- Hole for fastening
- 3-axis accelerometer for motion detection
- Powered by one replaceable CR2032 coin battery

Wirepas Specifications

Based on Wirepas Mesh 2.4GHz stack v5.x

Available applications: BlueUp PosApp

BlueUp PosApp

Configuration and diagnostics	WNT (Wirepas Network Tool) / BlueUp MeshCube
Operating modes	NRLS tag, Autoscan tag (configurable for each state)
Tag states	Default, Motion, Alarm, Sleep
Positioning interval and timeout	15 secs to 18 hours (configurable for each state)
BLE beaconing	iBeacon, Safety, Quuppa Emulation (configurable for each state)

Device specifications

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	Wirepas Mesh 2.4GHz (stack v5.x)
Frequency band	2.402 to 2.480 GHz
Channel spacing	2 MHz
BLE beaconing channels	CH37 (2.402 GHz), CH38 (2.426 GHz), CH39 (2.480 GHz)
TX power	Conducted: +4 dBm (max)



BlueUp S.r.l.
Loc. Belvedere, Ingresso 2, 53034 Colle di Val d'Elsa (SI) - ITALY
Tel. +39 0577 043101 / +39 344 2030929, Fax +39 0577 043101
E-mail: info@blueupbeacons.com, Web: www.blueupbeacons.com
P.IVA/CF/N. iscr. CCIAA (SI). 01373980521, VAT n.: IT01373980521

Antenna	
Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation diagram	Omnidirectional
Power	
Power supply	Battery
Replaceable	Yes
Type	1x CR2032 (3V, lithium)
Model	Panasonic CR20232 or equivalent (typical capacity 220 mAh @ 25°C)
Sensors and interfaces	
Sensors	3-axis MEMS linear accelerometer
Interfaces	1x LED (blue)
Mechanical specifications	
Material	ABS plastic
Color	White
Size	36 x 23 x 5 mm
Weight	6.5 gr
Fastening	1 hole screw or cable-tie, dual-sided adhesive
Opening	snap-fit
IP rating	-
Flammability	UL 94 HB
Environmental specifications	
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 (pending)	

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