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P.IVA/CF/VAT N. IT01373980521

Brick Quuppa

Quuppa Intelligent Locating System® asset tag

Data sheet

Key features

- **Suitable for outdoor and industrial applications**
- **Based on Nordic nRF52832**
- **Firmware based on Quuppa libraries**
- **3-axis accelerometer for motion detection**
- **Rugged IP67 enclosure**
- **Powered by replaceable lithium thionyl chloride battery pack ER14505 1S2P**

General features	
Quuppa Compatible: based on Quuppa libraries	
Supports back-channel communication, proprietary channels, OTA Firmware Upgrade	
Configuration options	Configurable with Quuppa Site Planner
TX power	-40, -20 to 4 dBm (with 4 dB steps)
Advertising interval	0.1 to 10 secs (BLE channel) 0.02 to 10 secs (Quuppa proprietary channel)
Advertising channels	BLE (CH37 – 2.402 GHz) or Quuppa proprietary
Quuppa ID	MAC address or custom ID

Device specifications	
Electrical specifications	
Core module	Nordic nRF52832 SoC (MCU and radio transceiver)
MCU core	64 MHz ARM Cortex-M4 32-bit CPU, 512/256 KB Flash, 64/32 KB RAM
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 (Bluetooth 5-ready)
Frequency band	2.402 to 2.480 GHz (according to Bluetooth 4.0 specifications, worldwide ISM band)
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)

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	EIRP (Equivalent Isotropic Radiated Power): +6 dBm (max)
General features	
Antenna	
Type	Printed meandered planar F-antenna
Gain	2 dB (max)
Radiation diagram	Omnidirectional
Power	
Power supply	Battery
Replaceable	Yes
Type	2x AA 3.6V Lithium Thionyl Chloride LiSoCl2
Model	Battery pack 2x HCB ER14505 1S2P (3.6V, Lithium Thionyl Chloride LiSoCl2, 5200 mAh typ. capacity @ 25°C)
Sensors and interfaces	
Sensor	3-axis linear accelerometer
Interface	Led (internal, on PCB)
Mechanical specifications	
Material	Polycarbonate plastic
Color	Light grey RAL7035
Size	64 x 58 x 35 mm (Ver. NF: no-flange enclosure) 94 x 58 x 35 mm (Ver. WF: flanged enclosure)
Weight	94 gr (Ver. NF: no-flange enclosure) 108 gr (Ver. WF: flanged enclosure)
Wall fastening	Screws (invisible wall-mounting within the base part or flanges), silicone glue, double side tape
Opening	Front cover with screws
Protection	IP67 / NEMA6
Flammability	UL94-HB (UL94-V0 on demand)
Environmental specifications	
Operating temperature	-40°C to +75°C (contact us for battery life at extreme conditions)
Storage temperature	0°C to +30°C, RH<75% (with battery)
Certifications	
CE (RED), EN60601-1-2 (EMC for medical equipment), EN50121-3-2 (EMC for railway applications), ECE R10-06 (EMC for automotive)	

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Versions

NF

Enclosure without flanges
Front cover allows an easy battery replacement.

Size: 64 x 58 x 35 mm

WF

Enclosure with flanges
For fast and robust wall installations.
Front cover allows an easy battery replacement.

Size: 94 x 58 x 35 mm

BlueUp reserves the right to change product specifications at any time without prior notice.
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