

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
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TX power	-40, -20 to 4 dBm (with 4 dB steps)
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Advertising interval	0.1 to 10 secs (BLE channel) 0.02 to 10 secs (Quuppa proprietary channel)
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Advertising channels	BLE (CH37 – 2.402 GHz) or Quuppa proprietary
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Quuppa ID	MAC address or custom ID
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Device specifications

Electrical specifications

Core module	Nordic nRF52832 SoC (MCU and radio transceiver)
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MCU core	64 MHz ARM Cortex-M4 32-bit CPU, 512/256 KB Flash, 64/32 KB RAM
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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
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Radio specifications

Standard	Bluetooth 4.2 Bluetooth Low Energy (Bluetooth 5-ready)
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Frequency band	2.402 to 2.480 GHz (according to Bluetooth 4.0 specifications, worldwide ISM band)
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Advertising channels	CH37 (2.402 GHz), CH38 (2.426 GHz), CH39 (2.480 GHz) (according to Bluetooth 4.0 specifications)
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Channel spacing	2 MHz (according to Bluetooth 4.0 specifications)
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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 LiSoCl ₂
Model	Battery pack 2x HCB ER14505 1S2P (3.6V, Lithium Thionyl Chloride LiSoCl ₂ , 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)	

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 w/o flanges: 64 x 58 x 35 mm

Size w flanges: 94 x 58 x 35 mm

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