

Brick BLE

Bluetooth Low Energy beacon

Data sheet



Key features

- Suitable for outdoor and industrial applications
- Based on Nordic nRF52832
- Simultaneous support of iBeacon and Eddystone
- 3-axis accelerometer for motion detection
- Rugged IP67 enclosure
- Ultra-long battery life with replaceable 3.6V lithium battery-pack

GATT and advertising

Full support for specifications Eddystone Configuration GATT Service by Google

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

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

TX power	-40, -20 to 4 dBm (with 4 dB steps). Programmable for each slot
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Advertising interval	0.1 to 60 secs. Programmable for each slot
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Global configuration options	non-connectable mode, anonymous mode, programmable time period, locked/unlocked mode, change password
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Firmware update	OTA (Over-the-Air) firmware update
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Device specifications

Electrical specifications

Core module	Nordic nRF52832 SoC (MCU and radio transceiver)
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MCU core	ARM Cortex-M4 32-bit CPU
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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 (compatible with BLE 5.x)
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Frequency band	2.402 to 2.480 GHz (according to Bluetooth 4.0 specifications)
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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) EIRP (Equivalent Isotropic Radiated Power): +6 dBm (max)
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Antenna	
Type	Integrated meandered planar inverted F-antenna (PIFA)
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	
Sensors	3-axis MEMS linear accelerometer
Interfaces	-
Mechanical specifications	
Material	Polycarbonate plastic
Color	Light grey RAL7035
Size	64 x 58 x 35 mm (enclosure without flanges) 94 x 58 x 35 mm (enclosure with flanges)
Weight	94 gr (enclosure without flanges) 108 gr (enclosure with flanges)
Fastening	Screws (not included), silicone glue, double side tape
Opening	Front cover with four screws
Protection	IP67/NEMA6
Flammability	UL 94 HB (UL94-V0 on demand)
Environmental specifications	
Operating temperature	-40°C to +75°C (battery operating life decreases under -10°C)
Storage temperature	+10°C to +30°C (with battery), -40°C to +85°C (without 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	
	Standard version, without flanges Front cover allows an easy battery replacement. Size: 64 x 58 x 35 mm
WF	
	Standard version, 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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