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

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
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

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	Bluetooth 4.2 Bluetooth Low Energy (compatible with BLE 5.x)
Frequency band	2.402 to 2.480 GHz (according to Bluetooth 4.0 specifications)
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)

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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 LiSoCl2
Model	Battery pack 2x HCB ER14505 1S2P (3.6V, Lithium Thionyl Chloride LiSoCl2, 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)	

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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: 94 x 58 x 35 mm

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