

Board/B BLE

Bluetooth Low Energy beacon

Data sheet



Key features

- Ideal for industrial and outdoor applications
- Simultaneous support of iBeacon and Eddystone
- Rugged resistant IP67/NEMA6 enclosure
- External DC power supply with voltage range up to 30V DC

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, -30, -20 to 4 dBm (with 4 dBm 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

Device specifications

Electrical specifications

Core module	Nordic nRF51822 SoC (MCU and radio transceiver)
MCU core	ARM Cortex-M0 32-bit CPU
Current consumption (25°C)	Radio TX: 8 mA (0 dBm) Radio RX: 9.7 mA Idle mode: 3 µA Sleep mode: 1.5 µA

Radio specifications

Standard	Bluetooth 4.1 Bluetooth Low Energy
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)



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Antenna	
Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation diagram	Omnidirectional
Power	
Power supply	External DC voltage
Connector	2-pole 2.54 mm connector header (customizable)
Voltage	2.7 – 30 VDC
Current	10 mA (peak) 0.2 mA (average, at PTX = 0 dBm and ADV = 100 msec)
Mechanical specifications	
Aspect	Polycarbonate plastic enclosure
Color	Light grey RAL7035 (silk-screen printing available on demand)
Size	115 x 65 x 40 mm
Weight	112 gr
Wall fastening	Flanges with screws
Opening	Front cover with screws
Protection	IP65 / NEMA4
Flammability	UL 94 HB
Environmental specifications	
Operating temperature	-30°C to +75°C
Storage temperature	-40°C to +85°C
Certifications	
CE (RED)	

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