


## Badge-Holder BLE

### Bluetooth Low Energy wearable tag

#### Data sheet



#### Key features

- Suitable for people or asset location
- Based on Nordic nRF52832
- Simultaneous support of iBeacon and Eddystone
- 3-axis accelerometer for motion detection
- Call button
- Holder for ISO/IEC 7810 cards, with IP67 rating
- Powered by thin lithium battery

#### 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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<b>Antenna</b>	
Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation diagram	Omnidirectional
<b>Power</b>	
Power supply	Battery
Replaceable	No
Type	1x CP224147 (3V, lithium)
Model	HCB CP224147 (typical capacity 800 mAh @ 25°C)
<b>Sensors and interfaces</b>	
Sensors	Button, 3-axis MEMS linear accelerometer
Interfaces	2 LEDs (yellow, green)
<b>Mechanical specifications</b>	
Material	ABS plastic
Color	White
Size	95 x 64 x 7 mm
Host ID card	ISO7810 ID-1 (85,6 x 54 x 0.76 mm)
Weight	24 gr
Fastening	Two eyelets for lanyard (either horizontal or vertical orientation)
Opening	Ultrasonic welded
Protection	IP67/NEMA6
Flammability	UL 94 HB
<b>Environmental specifications</b>	
Operating temperature	-20°C to +60°C (battery operating life sharply decreases under -10°C)
Storage temperature	10°C to +35°C
<b>Certifications</b>	
CE, FCC	

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