


## SafeX BLE

### Bluetooth Low Energy wristband tag with alarm button

#### Data sheet



#### Key features

- Suitable for people tracking and safety
- Based on Nordic nRF52832
- Simultaneous support of iBeacon and Eddystone
- 3-axis accelerometer for motion detection
- Button, 2x LEDs, vibration, buzzer
- IP65 case with silicone wristband
- Powered by replaceable CR2477 lithium battery

Works with  
Apple iBeacon

E

Eddystone

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), Safety	
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)



<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	Yes
Type	CR2477 (3V, lithium)
Model	Panasonic Industrial CR2477 (typical capacity 1000 mAh @ 25°C)
<b>Sensors and interfaces</b>	
Sensors	3-axis MEMS linear accelerometer, alarm button
Interfaces	2x LEDs (yellow, red), buzzer, vibration
<b>Mechanical specifications</b>	
Material	Case: ASA plastic Wristband: Silicone
Color	Case: white (RAL9016) Wristband: black
Size	55 x 46 x 17 mm (plastic case only)
Weight	45 gr
Fastening	Silicone band
Opening	Back lid with four M2 Torx screws
Protection	IP65
Flammability	UL 94 HB
<b>Environmental specifications</b>	
Operating temperature	-20°C to +60°C (battery operating life sharply decreases under 0°C)
Storage temperature	+10°C to +30°C (with battery), -40°C to +85°C (without battery)
<b>Certifications</b>	
CE	

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