


SafeX Plus Wirepas


Wirepas Mesh 2.4GHz wearable tag with alarm button

Data sheet



Key features

- Suitable for people tracking and safety
- Based on Nordic nRF52832
- Firmware based on Wirepas libraries
- 3-axis accelerometer for motion detection
- Button, 2x LEDs, vibration, buzzer
- IP65 case with eyelet for lanyard
- Powered by rechargeable lithium battery



Wirepas

Wirepas Specifications

Based on Wirepas Mesh 2.4GHz stack v5.x
 Available applications: Wirepas PosApp, BlueUp PosApp

Wirepas PosApp

Configuration and diagnostics	WNT (Wirepas Network Tool)
Operating modes	Opportunistic anchor, NRLS tag, Autoscan tag, DA tag
BLE beaconing	iBeacon, Eddystone UID, Eddystone URL (fixed packet)

BlueUp PosApp

Configuration and diagnostics	WNT (Wirepas Network Tool) / BlueUp MeshCube
Operating modes	NRLS tag, Autoscan tag (configurable for each state)
Tag states	Default, Motion, Alarm, Sleep
Positioning interval and timeout	15 secs to 18 hours (configurable for each state)
BLE beaconing	iBeacon, Eddystone UID, Quuppa Emulation (configurable for each state)

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	Wirepas Mesh 2.4GHz (stack v5.x)
Frequency band	2.402 to 2.480 GHz
Channel spacing	2 MHz
BLE beaconing channels	CH37 (2.402 GHz), CH38 (2.426 GHz), CH39 (2.480 GHz)
TX power	Conducted: +4 dBm (max) EIRP (Equivalent Isotropic Radiated Power): +6 dBm (max)
Antenna	
Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation diagram	Omnidirectional
Power	
Power supply	Battery
Replaceable	No
Rechargeable	Yes (through 5V USB-C port)
Type	3.7V lithium polymer (typical capacity 540 mAh @ 25°C)
Sensors and interfaces	
Sensors	3-axis MEMS linear accelerometer 2x buttons (alarm button, on/off button)
Interfaces	1x RGB LED, buzzer, vibration
Mechanical specifications	
Material	Case: ABS-PC Button, gasket: TPU
Color	White
Size	73 x 40.5 x 17 mm
Weight	37 gr
Fastening	Eyelet for lanyard
Protection	IP65
Flammability	UL 94 HB
Environmental specifications	
Operating temperature	0°C to +40°C
Storage temperature	+10°C to +30°C
Certifications	
CE	

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