SafeX Lite Quuppa

Quuppa Intelligent Locating System® wearable tag with alarm button

Data sheet

Key features

- **Suitable for people tracking and safety**
- **Based on Nordic nRF52832**
- **Firmware based on Quuppa libraries**
- **3-axis accelerometer for motion detection**
- **Button, 2x LEDs, with optional vibration and buzzer**
- **Eyelet for lanyard or clip**
- **Powered by replaceable CR2477 lithium battery**

Quuppa Specifications

Quuppa Compatible: based on Quuppa libraries	
Full support of Quuppa Intelligent Locating System® functionalities: BLE and proprietary channels, back-channel communication, profile configuration, OTA FW update	
Configuration and diagnostics	QSP (Quuppa Site Planner), QPE (Quuppa Positioning Engine)
Advertising interval	0.1 to 10 secs (BLE channel) 0.01 to 10 secs (Quuppa proprietary channel)
Advertising channels	BLE (CH37 – 2.402 GHz) or Quuppa proprietary
Quuppa ID	MAC address or custom ID
Custom features	Advanced motion detection (intensity/duration, shock, free-fall, man-down) Advanced button management (single/double click, long-press) Back-channels commands for configuration and trigger notification

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	Quuppa Intelligent Locating System®
Frequency band	2.401 to 2.481 GHz (Bluetooth LE 4.0 + Quuppa proprietary channels)
Channel spacing	2 MHz
TX power	-40, -20 to 4 dBm (with 4 dB steps)
RX sensitivity	-94 dBm

Antenna	
Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation diagram	Omnidirectional

Power	
Power supply	Battery
Replaceable	Yes
Type	CR2477 (3V, lithium)
Model	Panasonic Industrial CR2477 (typical capacity 1000 mAh @ 25°C)

Sensors and interfaces		
Version	Base	Standard
Sensors	3-axis MEMS linear accelerometer, alarm button	
Interfaces	2x LEDs (yellow, red)	2x LEDs (yellow, red), buzzer, vibration

Mechanical specifications	
Material	ABS plastic
Color	White
Size	55 x 45 x 16 mm (case-body only) 64 x 45 x 16 mm (including flange with eyelet)
Weight	23 gr
Fastening	Eyelet for lanyard or clip
Opening	Back lid with four M2.5 screws
Protection	-
Flammability	UL 94 HB

Environmental specifications	
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)

Certifications	
CE	