TagX SHT Quuppa
Quuppa Intelligent Locating System® asset tag with sensors
Data sheet

Key features

- **Suitable for outdoor and industrial applications**
- **Based on Nordic nRF52832**
- **Firmware based on Quuppa libraries**
- **3-axis accelerometer for motion detection**
- **Temperature and Humidity sensors**
- **2x LEDs for signaling**
- **Enclosure with flanges for flexible fastening**
- **Powered by replaceable CR2477 coin 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) 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

Radio specifications

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

Sensors	3-axis MEMS linear accelerometer Temperature Humidity
Interfaces	2x LEDs (yellow, red)

Sensors specifications

Temperature	$\pm$0.2°C (0-70°C), $\pm$0.3°C (-40-100°C)
Humidity	3%RH (RH=0 to 85%RH), 4%RH (RH=85 to 95%RH)

Mechanical specifications

Material	ABS plastic
Color	White
Size	77 x 46 x 16 mm (including flanges)
Weight	27 gr
Fastening	Screws (max. M3.5), cable-ties
Opening	Back lid with four 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