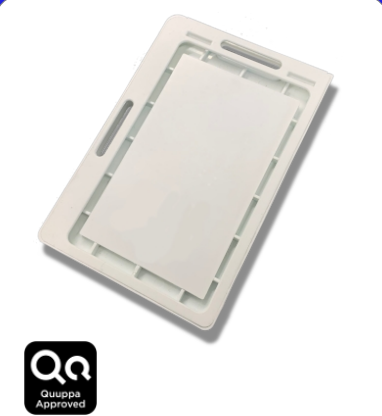


## Badge-Holder Quuppa

### Quuppa Intelligent Locating System® wearable tag

### *Data sheet*



#### Key features

- Suitable for people location and tracking
- Based on Nordic nRF52832
- Firmware based on Quuppa libraries
- 3-axis accelerometer for motion detection
- Call button
- Holder for ISO/IEC 7810 cards, with IP67 rating
- Powered by thin lithium battery

#### Quuppa Specifications

|   |   |
|---|---|
| Quuppa Approved: based on Quuppa libraries and certified by Quuppa  |   |
| 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)<br>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)<br>Advanced button management (single/double click, long-press)<br>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)<br>Radio RX: 6.5 mA<br>Idle mode: 3 µA<br>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   |



| <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 0°C) |
| Storage temperature                 | 10°C to +30°C   |
| <b>Certifications</b>               |   |
| CE, FCC                             |   |

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