

Wi-Fi / BLE Badge Tag for Social Distancing and Real-Time Staff Safety



The AiRISTA B3 badge tag provides proximity detection for social distancing and contact tracing using an existing Wi-Fi network. These badges are similar in size and shape of typical ID badges, to fit easily on a lanyard with other credential cards or on a belt clip.

As a social distancing solution, the AiRISTA B3 detects other tags within a proximity range and alerts the user. The tag's Wi-Fi capability will upload the tag's contacts using existing wireless infrastructure to the AiRISTA RTLS software platform which provides reports and automates contact tracing.

Proximity sensing, contact storage, and BLE / Wi-Fi gateway capability make it an ideal tag for social distancing and contact tracing

The B3 badge also gives key staff the information they need using business rules that are context-aware (such as tag button press, location, or proximity) and condition-aware (item category, count, or temperature).

Using the B3, a staff member is able to send an alert if being attacked or if immediate help is needed. In addition, a built-in motion sensor enables automated "man down" alarms. The alarm, which reveals the precise location of the badge at the time of the alert, can be programmed to notify security, and third party applications to re-point video cameras, or control door locks and lighting— all customized to your environment.

The B3 badge tags use a high-energy, rechargeable battery that works for weeks (depending on location update interval) without recharging. The battery can be charged using individual USB charging cables or a rack charger, which can charge up to ten badge tags at a time.

Benefits

- Predefined proximity settings alert the user for social distancing
- Proximity contact records facilitate automated contact tracing
- Accurately locate staff, visitors, and other personnel
- Reduce response times with AiRISTA's exclusive two-way communication features
- Customize alarms and notifications with two call buttons
- Stay powered with rapid two hour charging

Features

- BLE 4X & 5.X compliant
- Proximity detection
- BLE / Wi-Fi gateway capability
- Safety pull for staff duress
- 2 programmable buttons
- Audio buzzers and two LEDs for on-board alerting
- BLE 5.1 support for fine grained location accuracy

Wi-Fi Radio

Supported Wi-Fi Networks: 802.11 b/g/n
Sleep Mode Maximum Leakage Current: <10ua
TX 802.11b, CCK 11 Mbps, Pout = +19 dBm
TX 802.11g, OFDM 54 Mbps, Pout = +17 dBm
TX 802.11n, MCS7, Pout = +17 dBm
Rx 802.11b, 1024 bytes packet length, -80 dBm
Rx 802.11g, 1024 bytes packet length, -70 dBm
Rx 802.11n, 1024 bytes packet length, -65 dBm
FCC, Canada, ETSI 2.4 - 2.4835 GHz
Japan 2.471 -2.497 GHz
Layer 2 Network Support: CCX, Blink
Security: WEP, WPA2-PSK
Supported Data Rates, 1, 6,11,54,72 Mbps

BLE Radio

Blue-tooth Low Energy (BLE) Radio
BLE 4.1, 4.2 and 5.0 Compliant
RX BLE: 6mA
TX BLE: 6mA
TX BLE max Out Put Power: 5dBm

Electrical Interface

DC Power: Rechargeable Lithium Polymer battery
Capacity: 600mAh
Rated cycle life: 300 cycles > 70% of initial cap Interface
Antenna: Omni-directional antenna

Battery Life

*Average 24-36 hours per full charge

*This time will depend on the configuration applied to the tag.

User Interface

Two call buttons and a menu button
Two red/green signal LEDs
Safety switch for lanyard
Customizable Alarms

Frequency band

Channels 1-11: North America
Channels 1-13: Global
Channels 1-14: Japan

Environment

Operating Temperature: 32 to 122 °F / 0 to 50 °C
Storage Temperature: -40 to 140 °F / -40 to 60 °C
Humidity: 95 % non-condensing, relative humidity
Protection: dust and splash proof enclosure

Typical Operating Range

Line of Sight:

330 ft/100 m @11Mbit/s, 500 ft/150 m @2Mbit/s*

Obstructions:

140 ft/40 m @11Mbit/s, 200 ft/60 m @2Mbit/s

Physical

Dimensions:

3.54 x 2.36 x 0.33 in / 90 x 60 x 8.5 mm

Weight: 1.7 oz. / 48 g

Certifications

FCC: Part 15 (US and Canada)
CE Mark (European Union)
Cisco Support: CCX protocol support

Part Number

Badge Tag: B3

Multi-charger for 10 B3 badges: B4-10-Multicharger

USB Charging Cable: B4-USB

Charging Adapter: Charge-adapter

Car Charger: B4n-CarCharger

*Specifications subject to change without prior notice.