

# A3 Wi-Fi / BLE

1 – Button Asset Tag

# Wi-Fi / BLE Tag for Asset Tracking



AiRISTA's A3 asset tag is designed to monitor assets within a Wi-Fi / BLE network environment. The A3 Wi-Fi / BLE asset tag provides options to generate alerts based on vibration.

A3 Wi-Fi / BLE

This tag allows the user to develop on an open system without using proprietary infrastructure and seamlessly integrates with AiRISTA's RTLS Location Engine.

# **Industry-Leading Location Accuracy**

With a small yet rugged water-resistant form factor, the A3 Wi-Fi / BLE asset tag can be affixed to virtually any piece of equipment or fixture indoors or outdoors for enterprise-wide tracking. AiRISTA's RTLS platform leverages asset data to process definable to automate processes and drive greater efficiency.

AiRISTA Wi-Fi / BLE asset tags are rugged and can be used for a variety of applications across multiple industries such as healthcare, logistics, hospitality and manufacturing.

## **Benefits**

- Combines use cases for location and choke point detection
- Impact sensing for crash/damage detection
- Motion sensing wakes tag from sleep
- Build business process workflows with AiRISTA's Unified Vision Solution software combining location, condition sensing and button push.

#### **Features**

- BLE 4.2, 5.0 compliant
- Wi-Fi 802.11b/g/n compliant (Encryption: WEP, WPA, WPA2)
- Long-life replaceable battery
- Multiple ways to attach tags to assets
- Accelerometer "wake on motion" optimizes battery life (optional)
- General purpose tactile call button
- Visual indicators through multiple LEDs (based on model)
- Over-the-air programming and configuration capabilities
- Cisco Systems wireless protocol support for over-the-air management, telemetry, and firmware updates
- Optional flange

# **Technical Specifications**

# A3 Wi-Fi / BLE

#### 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**

Replaceable 1200 mAH, 3.0V Lithium Battery

Antenna: Omni-directional antenna

Configuration: Over-the-air remote configuration

### **Battery Life**

Up to 5 years of battery life depending on the beacon rate and configuration

#### Accelerometer

- 3-axis "nano" accelerometer
- Ultra-low-power consumption (down to 2 uA)
   2g/±4g/8g/16g dynamically selectable full scale
   6D/4D orientation detection
- Free-fall detection
- Motion detection
- Embedded self-test
- 10000 g high shock survivability

# 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: 50 to 70 °F / 10 to 25 °C

## **Typical Operating Range**

Line of Sight:

Wi-Fi: 330 ft (100 m) @11Mbits/s @19dB power

BLE: Up to 150 ft (45 m)\* @4dB power

Obstructions:

Wi-Fi: 150 ft (45 m) @11Mbits/s @19dB power

BLE: Up to 75 ft (25 m)\* @4dB power

## **Physical**

Dimensions: 52 x 32 x 13 mm /2.17 x 1.26 x .51 in

Weight:  $< 38 \, g / 1.34 \, oz$ 

Form Factor: ABS/ Polycarbonate enclosure (IP64,

NEMA 4X)

#### Certifications

FCC: Part 15 (US and Canada) CE Mark (European Union)

Cisco Support: CCX & LTX protocol support

#### Part Number (Identical to T4 tags)

A3.B (BLE) A3.W (WiFi) A3.LTX
A3.WB (BLE & Wi-Fi)
A3.Flange (Add W / B for BLE &/or Wi-Fi)
A3.BATT (A3 Replacement Battery)

#### Warranty

One Year Warranty

\*Specifications subject to change without prior notice.

AiRISTA Flow, Americas 1966 Greenspring Dr. | Suite 120 Timonium, MD | 21093 | USA Tel: 1-844-816-7127 info@airista.com AiRISTA Flow, APAC Level 9 Wyndham Building 1 Corporate Court Gold Coast | QLD | Australia Tel: +61 07-2104-1852

AiRISTA Flow, EMEA Espoo | Finland info@airista.com