



AiRISTA's Proximity Sensor Units (PSU) are provided in two different functionalities, one as a managed BLE to Ethernet Gateway (WGU) and the other as a managed BLE Beaconsing Unit with monitoring and remote management (WBU).

Wireless Gateway Units (WGU) are designed to listen for Blue Tooth Low Energy (BLE) beacons and transmit the observed beacons data to the AiRISTA Unified Vision Server (UVS) and/or sofia® for proximity detection and location calculation over Ethernet connection.

As a Wireless Beaconsing Unit (WBU), it functions as a standard BLE beacon supporting iBeacon, Eddystone and AiRISTA's proprietary protocols.

Industry Support

Supported BLE beacon protocols include iBeacon, Eddystone and AiRISTA's proprietary beacons. PSUs are managed by UVS and can be monitored for mission critical applications.

Application

PSUs functioning as a WGU are ideal for proximity sensing (choke point) applications where real-time detection of BLE tags and/or beaconsing devices is required. WBUs can be used for any application requiring BLE standard beacons. Utilizing AiRISTA's UVS Location Engine, PSUs can identify the location of the tag/device. Packets transmitted from a series of PSUs can be correlated by the UVS Location Engine for highly accurate location determination when applying business rules to detect events, trigger actions, and automate processes and workflows.

Benefits

- Choke point detection of people and things
- Sensitivity levels programable via software
- Separate mounting bracket on swivel
- Ideal for alerts and process workflows
- Augment existing BLE infrastructure for higher location accuracy
- Automatic failover for server routing

Features

- Connector for external antenna options
- Whip antenna for standard configurations
- Directional high-gain antenna available for longer distances
- Power over Ethernet (PoE) provides power and network interface

Technical Specifications

PoE BLE Gateway and Beacon BLE Proximity Sensing and Beaconing Unit

BLE Radio

Power Consumption:
RX BLE: 5 mA
TX BLE at 0dBm: 6 mA
Firmware configurable transmit power: -6dBm to +4dBm
Operating Current TX & RX Disable: 6mA Cortex M3
Maximum Output Power: +4dBm
Default Output Power: 0dBm

PoE Ethernet Interface

Compatible with IEEE 802.3af
Supports Static and Dynamic IP address
Supports Backup Server IP Address List
Over LAN configuration
Built-in Http based management interface

Electrical Interface

Certification: FCC and CE
Current Consumption: 1A

Antenna Specifications

Internal Antenna Models: internal Omni-directional
External Antenna Models: Directional or Omni-Directional Antenna

Environment

Operating Temperature: 22 to 185 °F / -30 to 85°C
Storage Temperature: -22 to 140 °F / -30 to 85 °C
*outdoor installation requires NEMA 4X enclosures

Typical Operating Range

Line of Sight:

BLE +4dBm 1MBps: ~250ft/80m

BLE +4dBm 128KBps with Coded PHY: > 900ft/300m

Obstructions:

BLE +4dBm 1MBps: ~75ft/25m

BLE +4dBm 128KBps with Coded PHY: > 450ft/150m

Physical

Dimensions:

6.63 x 4.68 x 1.63 in / 168.40 x 118.87 x 41.40 mm.

Weight: 0.64 lbs

Part Number

WGU w/ Internal Antenna Model: WGU.WM.B.PoE

WGU External Antenna Model: WGU.WM.B.PoE.EANT

WBU w/ Internal Antenna Model: WBU.WM.B.PoE

WBU External Antenna Model: WBU.WM.B.PoE.EANT

Accessories

Swivel Wall Mount: PSU.MB

Directional Antenna: PSU.ANT.5in.DIR.2.4GHz

Omni-Directional Antenna: ANT.OMNI.WHIP.2.4GHz

Warranty

One Year Warranty

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