



### Active Bluetooth BLE Beacon RFID 2.4 GHz

# **Asset Locate System**

The system uses Bluetooth Low Energy (BLE) gateways that plug into standard AC power outlets (DC, PoE and Solar versions also available), as well as beacon tags and cloud-based software, to enable a fast and low-cost solution for RTLS tracking with location granularity down to 1 meter.

## √ Real-Time Inventory, Personnel and Equipment Locate Visibility

- √ Flexible Enterprise Platform Enforcing User-Defined Business Rules and Geo-Fences
- √ Place a beacon on any object to track and locate it inside of a *virtual* location grid in real time.
- √ Complete Integrated Solution-as-a-Service
  (Implement Now No Up-Front Capital Investment Required\*)



Canada and USA customers



#### Overview

FSN's Active BLE RFID-Enabled network detects zone location, movement and sensor data of tagged assets or inventory items moving around an area in which BluFi nodes are installed. It offers a low-cost alternative to other RTLS or Passive UHF RFID Locating Systems.

#### Fast and quick to implement

Other solutions require major installation investments in terms of servers, cables, antennas etc. FSN's cloud-based solution based on Bluvision **does not require wired hardware**. The installation entails plugging in of AC-powered BLE/WiFi gateways and attaching the sensor beacons to assets being tracked.

#### **Mounting Accessory**

The industrial beacon tags come complete with ultra strong, industrial grade permanent 3M VHB self-adhesive for mounting that is fully compatible with outdoor /indoor mountings and can sustain pressure-wash from zero distance. For on-metal beacon tags intended for retrieval, convenient removal and re-use, tags can be ordered with a neodymium magnet.

Our "install and go" solution gives enterprises the ability to quickly manage thousands of devices/assets and gain visibility into their precise location, at scale. As a cloud-based solution, we **do not require an on-site server configuration** and can get the data to the cloud using existing WiFi and Internet connectivity.

Our RTLS solution has fully exposed APIs pushing location data & micro geofence alerts.

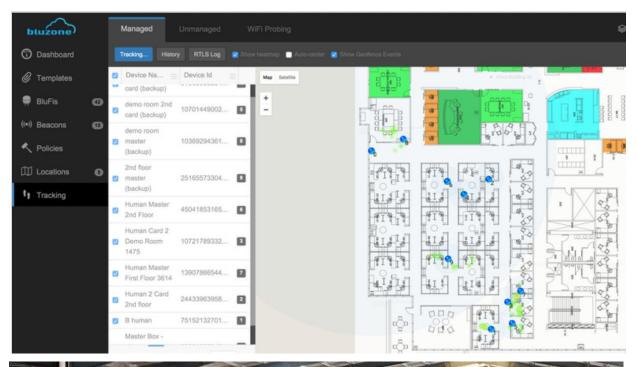
#### **Battery Life**

The smaller Mini Tags have a typical battery service life of up to 3 years. The larger tags are up to 5 years and one is available to 10 years.

#### **Location Accuracy**

If BluFi Gateways are installed approximately 10 meters (32.8 feet) apart, they will provide location data accuracy < 2 meters in a typical deployment. **Asset tracking** is **based** on the **distance** between individual beacons and their **proximity data**. Three or more beacons are necessary to **perform a triangulation** and thus represent the exact **position** between these beacons. Industry-Standard Bluetooth LE is the wireless communications protocol stack which Bluetooth mesh makes use of.







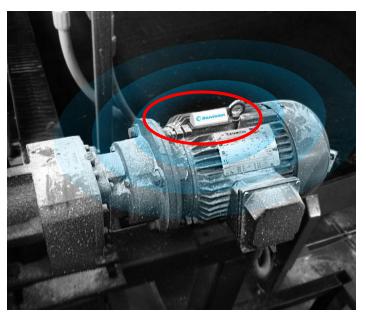




#### **Workforce Optimization**

Similarly, our BLE-enabled name badges enable employers to better manage their workforce, ensuring that the right employees are at the right place at the right time, ascertaining optimal performance. Further, our solution integrates with Passive RFID Access Control systems such as HID Global.

#### **Condition Monitoring**



Lost capacity and downtime are the biggest threats to manufacturing units. By leveraging the integrated Temperature Magnetometer, and Accelerometer sensors in the BLE Tags, we are able to monitor the health of motors and motorized equipment such as conveyors and lifts by monitoring telemetry data such as vibration and temperature and understanding the trendline on every piece of equipment. Our solutions are product and equipment agnostic and can be easily affixed to any surface. Our Bluzone Cloud can provide alerts

and notify appropriate personnel when a failure is predicted. Further, analytics can be used to study trend lines to predict failures.

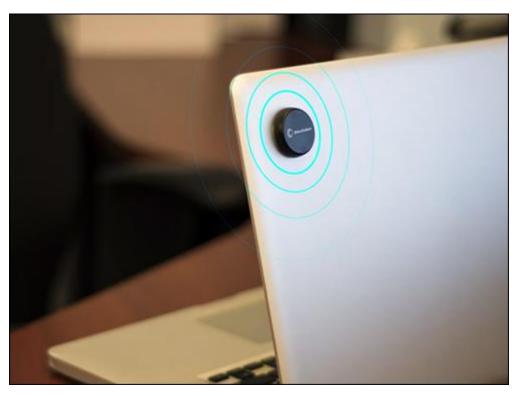


#### **Mini Tamper Proof Tag**

The new HID Mini Tamper Proof Tag guards high-value assets or supplies, by detecting if someone breaks the beacon adhesive, and then receiving 'real-time' alerts based on that removal attempt action.

#### **WIRELESS**

Eliminates costly power and network cabling infrastructure WITH TAMPER-PROOF Real-Time Alert upon Removal Attempt



The Mini Tamper-Proof Tag

Until now, there was little way for companies to ensure that beacons or RFID Tags were not tampered with. If someone were to remove a beacon from an asset or location, he or she could potentially walk away with the very asset that a BLE system was designed to manage or protect. In some cases, the perpetrator could simply use a cutting device as basic as a razor blade, heat gun, solvent or fishing line to sever the adhesive connection between the asset and the beacon. In many cases, tamper-evident meant the tag was simply broken upon removal. This vulnerability on the part of the beacons and RFID Tags created obstacles for companies and agencies that wanted to track such items as high-value assets at military installations or electronics in an office environment or in a supply chain. Utilizing special conductive technology, the new Mini Tamper-Proof Tag overcomes these issues.



At the size of two US quarter coins, the device is suitable for mounting on a variety of assets from computers and medical equipment to high value tools and inventory, where there is a requirement for discrete size and small footprint. As with the rest of the BLE Tag family, it is IP67 rated and can be ordered with several sensors including an accelerometer for vibration or movement, magnetometer, light and a sensor for temperature monitoring.

The solution is based on customer-defined business rules and real-time alerts for any violations of those rules. Thereby, operational visibility is considerably enhanced as well as automated and consistent operations workflow according to those defined policies. So, if a user wanted managers to receive alerts only if a beacon tag is moved at specific times and locations, they could direct the system accordingly. The solution, for example, can be programmed to send tamper alerts to one official, and other data (such as beacons' movements) to another individual

Optional Neodymium Magnets are provisioned with ruggedized adhesive to permanently affix to the tags. The tags are then easily placed on steel towers with a 3 to 5 lb. pull-force for removal and redeployment. These great magnets are costed with a durable layer of



redeployment. These great magnets are coated with a durable layer of plastic. The 1/2" x 1/4" dimensions are the finished dimensions of the plastic coating. They won't mark or scratch surfaces they come in contact with. Various colors are available and they are also completely weatherproof and operate up to 80°C.

#### We Make It Simple to Implement Now

-NO UP FRONT CAPITAL IS REQUIRED  $\,\,\dots\,\,$  For installations in Canada and

USA, pay monthly like a utility bill over the Plan period.







Headquartered in the Greater Toronto Area, FALKEN Secure Networks Inc. (FSN) is the leading System Integrator, Consultant Solution Architect and Value-Added Reseller for advanced Active/Passive Unified RFID, GPS and Wireless Sensor networks, Integrated Video Surveillance, Wireless LAN networks and Secure Enterprise Communications that leverage 'Best-In-Class' standards-based technologies. FSN integrates RF technologies for asset tracking, vehicle fleet and parking management, library, document, people and Manufacturing Work-In-Process visibility, for cost-effective design, and turn-key project implementation for enterprises globally. FSN's domain expertise, especially for complex and harsh operational environments, and breadth of FSN's RFID solution portfolio is unsurpassed.