



### Ruggedized Model with Extended Battery Life for Industrial Environments

#### Overview

The T2-EB Industrial Tag is part of AeroScout's leading family of Wi-Fi Tags. AeroScout Tags are small, long-life Active RFID devices that can be placed on any asset or person, enabling customers to accurately track and manage critical items.

The AeroScout T2-EB Industrial Tag is a streamlined model for industrial environments and equipment that require extended life and rugged design. The T2-EB Tag was specifically designed to endure extremely high levels of rugged usage. The tag can be attached to a wide variety of equipment and is resistant to the indoor and outdoor environmental hazards associated with industrial, shipping or high traffic environments. The tag also features an eight-year battery life, ensuring that tags can remain in the field for extended periods of time. This enables manufacturing equipment, vehicles and other assets to be accurately located in real-time without concerns about frequent replacement.



AeroScout tag messages can be received and processed by standard wireless access points as well as AeroScout Location Receivers, keeping infrastructure costs low and installation simple. Like all AeroScout Tags, T2-EB Tags can be used for chokepoint location, telemetry applications and more. AeroScout MobileView, an enterprise software solution, allows end users to utilize location data from the tags to improve business processes and better utilize assets.

#### Locate people, assets and mobile equipment in industrial environments

- Battery life up to eight years
- Rugged design
- Chokepoint detection capability
- Onboard motion sensors
- Data storage capability
- Wireless programmability and tag management

#### Key Features

##### Rugged Performance

T2-EB Tags are designed to handle the high levels of "wear and tear" associated with work environments such as manufacturing halls and outdoor yards. The form-factor design and material is structured for shock absorption and incorporates a soft sponge material layer surrounding the tag which increases durability for harsh levels of usage.

The tag's enclosure is dust protected and water-resistant to withstand significant physical use. The tag was tested for a wide array of hard impact shocks, continuous vibrations at varied levels and free-fall drops of up to two meters to facilitate consistent performance under these conditions.

##### Long Battery Life

A single, replaceable battery provides up to eight years of battery life. AeroScout tags provide battery-level reports for timely replacement. Tags also have motion sensors to conserve battery life when the tag is stationary.

##### Chokepoint Detection Capabilities

Combined with AeroScout Exciters, T2-EB Tags provide instant notification when a tagged asset passes through a gate, doorway or other tightly-defined area. Tag behavior can also be automatically modified when passing through a chokepoint. This includes activating/deactivating tags, or changing transmission rates to accommodate different usage scenarios.

##### Motion Sensing

AeroScout T2-EB Tags contain onboard motion sensors. The motion sensor can be configured to trigger alerts. It also enables different transmission intervals for tags when they are stationary or in motion – which reduces unnecessary network traffic and conserves battery life.

##### Tag Management

The T2-EB Tag can be easily configured and activated wirelessly via AeroScout's Tag Management Suite, which includes a Tag Activator device and Tag Management software.

### Wi-Fi Compatibility

AeroScout Tags use any standard Wi-Fi network infrastructure, keeping costs low and making deployments simple and fast. The tags can be used to determine the location and status of mobile assets, and their wireless messages are received by Wi-Fi access points. T2-EB Tags utilize a unique beaconing method (instead of associating with networks) that keeps network impact low and ensures scalability and long battery life.

### Tag Programmability and Storage

Up to 10 messages of 10 bytes each can be programmed onto the T2-EB Tag. The messages can be programmed by AeroScout's Tag Management Suite or on the fly by an AeroScout Exciter when a tag is in proximity of it. These messages can be transmitted and received wirelessly.



### Flexible Mounting and Usage Options

The tag comes in a convenient form with two flanges and a flat back, allowing mounting on a variety of assets using screws, tie wraps or adhesive.



T2-EB Tag is in use at TNT Logistics

## AeroScout T2-EB Tag Specifications

### PERFORMANCE

- **Outdoor range:** Up to 200m (650 feet)
- **Indoor range:** Up to 80m (260 feet)

### PHYSICAL AND MECHANICAL

- **Dimensions:** 85mm x 59mm x 19mm (3.35in x 2.32in x 0.75in), 113mm length (4.45in) with flanges
- **Weight:** 85g (3oz)
- **Housing:** IP-66 rated enclosure

### RADIO

- 802.11 radio compliant (2.4 GHz)
- Low frequency receiver for chokepoint detection (125kHz)
- Transmission power: up to +19dBm (~81mW)
- Patented clear channel sensing avoids interference with wireless networks

### PROGRAMMABILITY

- Transmission interval is configurable, 1 sec to 3.5 hours
- Channel programmable
- Wireless tag programming

### ENVIRONMENTAL

- **Temperature:** -30°C to +75°C (-22°F to +167°F)
- **Humidity:** 0 to 100%, condensing
- **IP rating:** IP-66

### ELECTRICAL

- 3.6V Lithium AA battery (replaceable)
- **Battery life:** up to 8 years (dependent on use and other factors)
  - o 7.5 years (transmission every 5 minutes)
  - o 6 years (transmission every 1 minute)
  - o 4.5 years (transmission every 30 seconds)

### CERTIFICATION

- **Radio:**
  - o FCC Part 15, sub-part C class B, sub-part B, EN 300- 328, EN 300-330, EN 301-489

### ACCESSORIES

- AeroScout Tag Management Suite
- Enclosure includes two flanges for using screws or tie wraps.
  - o A cage plate mount is also available.

## Ordering Information

For ordering and pricing information on the AeroScout T2-EB Tag, contact AeroScout at [info@aeroscout.com](mailto:info@aeroscout.com) and refer to the AeroScout T2 Tag line of products (BWH-3000-EB for tag, TAC-018 for cage plate mount).

## Contact Info AeroScout®

1300 Island Drive, Suite 202  
Redwood City, CA 94065  
Tel: +1 (650) 596-2994  
Fax: +1 (650) 596-2969  
E-mail: [info@aeroscout.com](mailto:info@aeroscout.com)  
Web: [www.aeroscout.com](http://www.aeroscout.com)

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US patent: 6,963,289  
US patent: 7,552,049 B2  
US patent: 7,403,108 B2

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