



Wi-Fi-based Active RFID Tags for Asset Tracking, Real-Time Location, Telemetry and More

Overview

The AeroScout T2 Tag is the most advanced Wi-Fi based Active RFID tag on the market, from the company that originated the Wi-Fi tag industry. The T2 Tag is a small, long-life Active RFID device that can be placed on any asset, enabling the Wi-Fi network to accurately locate that asset.

These rugged, battery-powered tags can be attached to people and to a variety of equipment, such as medical devices, containers, manufacturing equipment and vehicles. This enables those assets to be accurately located in real-time, in any environment— from tight indoor locations such as hospitals and offices to open outdoor spaces such as parking lots. In addition, the same tag can be used for choke-point location, call-button alerting, telemetry applications and more.



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. AeroScout MobileView, the system's enterprise software layer, allows end users to utilize location data from the T2 tags to improve business processes and better utilize assets.

Locate people, assets and mobile equipment in Wi-Fi environments:

- Long battery life
- Call button capabilities
- Motion sensor
- Telemetry capability
- Temperature sensor
- Rugged, intrinsically-safe design
- Choke-point detection capability
- Wireless programmability

Key Benefits

Long Battery Life

A single replaceable battery provides up to 4 years of battery life. The Tag provides a report on the battery level for timely replacement. The AeroScout T2 Tag can also be automatically activated or deactivated for conserving battery power.

Choke-point Detection Capabilities

Using the AeroScout Exciter, tags can be immediately and automatically detected and behavior can be modified as the tag passes through a choke-point, such as a doorway or gate. This includes turning tags on/off, or changing tag transmission rates.

Call Button Messaging

The call button feature adds the ability to define events according to a button pushed on the tag. This enables advanced functionality such as emergency reporting or parts replenishment. Multiple messages can be configured and associated with varying patterns, like a single long click sending a different message than three short clicks.

On-board Motion Sensor

The motion sensor can conserve battery life, trigger alerts and offer enhanced real-time tracking by enabling separate transmission intervals for tags when they are stationary or in motion, which also reduces unnecessary network traffic.

Sensor and Telemetry Functionality

AeroScout T2 Tags include a serial interface that enables data retrieval from host devices. The tags can be configured to retrieve data such as mileage, fuel or pressure measurements from the host periodically, and to send that data wirelessly in addition to the location messages. An optional on-board temperature sensor can enable the tag to transmit environmental data.

Rugged Performance

AeroScout Tags are designed to handle tough work environments such as manufacturing and outdoor applications. The Tag enclosure is water-resistant and designed to withstand significant physical shocks and drops. An intrinsically-safe version is also available for environments with special requirements such as oil refineries or mines.

Tag Programmability and Storage

The T2 Tag can store up to 10 messages of 10 bytes each. These messages can either be pre-programmed by the Tag Manager software or programmed on the fly by an AeroScout Exciter when a tag is in proximity.

Multi-LED Visual Indication

An optional multi LED (3 LEDs) visual indication enables an additional means of asset location with varied light indications.

Compatibility and Non-Interference

AeroScout T2 Tags are 802.11 compatible. The Tag's channel sensing techniques avoid interference with Wi-Fi networks. The use of the 2.4GHz frequency band at low power levels ensures no interference with other wireless equipment, making AeroScout Tags safe for use with such sensitive equipment as medical devices in a hospital.

Tag Management

The AeroScout T2 Tag can be programmed via a wireless interface and in batches of up to 50 tags at a time using the Tag Activator device. The Tag Manager software allows for easy and efficient tag configuration, activation or deactivation and programming for fast deployment and ease of use.

Flexible Mounting and Usage Options



The Tag's small size and weight and convenient form allow mounting on a variety of assets and people. Mounting accessories include a wrist strap, personnel badge clip and a mounting plate.

Other industry-specific mounting accessories are available, including vehicle rear-view mirror hangers, fixed and temporary trailer mounts and more.

AeroScout T2 Tag Specifications

PERFORMANCE

Outdoor range: Up to 200m (600 feet)

Indoor range: Up to 60m (180 feet)

PHYSICAL AND MECHANICAL

Dims: 62mm x 40mm x 17mm (2.44" x 1.57" x .67")

Weight: 35g (1.2oz)

Housing: IP-65 rated enclosure

RADIO

802.11b/g radio compliant (2.4 GHz)

RFID low frequency receiver (125kHz)

Transmission power: up to +19dBm, ~81mW

Clear channel sensing avoids interference with wireless networks

PROGRAMMABILITY

Transmission interval programmable, 128 msec-3.5 hours

Channel programmable

Wireless tag programming

ENVIRONMENTAL SPECIFICATIONS

Temperature: -30°C to +75°C (-22°F to +167°F)

Humidity: 0 to 100%, condensing

Housing is water and dust resistant and includes a rubber lining

ELECTRICAL

3.6V Lithium AA battery (replaceable)

Battery life: up to 4+ years (dependent on use and other factors)

- 3.75 years (transmission every 5 minutes)
- 3 years (transmission every 1 minute)
- 2.33 years (transmission every 30 seconds)

CERTIFICATION

Radio: FCC Part 15, sub-part C class B, sub-part B, EN 300-328, EN 300-330, EN 301-489, RSS 210 (Canada), ARIB STD-T66 (Japan), ARIB STD-33 (Japan), MIC (Korea)

Safety: CE, cTUVus (EN60950)

INTRINSICALLY SAFE CERTIFICATION*

- ATEX certified, Gas Group B, II 1 G EEx ia IIB T4/T5/T6 & IM1 EEx ia
- ATEX certified, Gas Group C, II 1 G EEx ia IIC T4/T5/T6 & IM1 EEx ia

ACCESSORIES

- AeroScout Tag Activator
- AeroScout Tag Manager software
- Mounting accessories: Tag Mounting Plate, Tag Hanger, Fixed Tag Trailer Mount, Temporary Trailer Mount, Personnel Badge Clip

*Optional

WARRANTY

Ninety (90) day limited warranty (not including battery)

Ordering Information

For ordering and pricing information on the T2 Tag and accessories, contact AeroScout at info@aeroscout.com and refer to the AeroScout T2 Tag line of products (BWH3000).

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