AeroScout®

AeroScout Products for Hazardous Environments

Intrinsically Safe and Explosion Proof Products for Oil & Gas, Mining, Pharmaceutical and Chemical Industries

Overview

AeroScout offers the industry's most advanced people and asset visibility solutions for Oil & Gas facilities, mines and pharmaceutical and chemical plants. These hazardous environments require special measures to ensure personnel safety. Providing full visibility to staff whereabouts in case of an emergency is extremely crucial for safe mustering and efficient evacuation. AeroScout asset visibility solutions can drastically improve efficiency and productivity – through tracking of valuable equipment, load haul dump trucks and other vehicles, tracking workers underground or on rigs, and more. In order to ensure safety in many of these environments, though, electronic equipment must meet strict regulations to protect against explosion.

To meet these industry requirements, AeroScout offers intrinsically safe (IS) and explosion proof versions of its most popular products, specifically built to deliver high-value asset visibility while meeting international regulatory certifications for explosion protection. Together, AeroScout's line of IS and explosion proof products offers a complete solution for automating business processes and delivering safer working environments.

Intrinsically Safe Wi-Fi Tags

Explosion Proof Location Receivers

Explosion Proof Exciters

Key Features

Visibility of any valuable asset or person
Using small, battery-powered Wi-Fi Tags, clients track the location and status of staff and a variety of assets and equipment.

Standard Wi-Fi infrastructure
The AeroScout solution utilizes standard wireless networks for its communications protocol, keeping the infrastructure cost low and enabling enterprises to gain more benefit from their existing WLAN.

Chokepoint detection
AeroScout provides instant knowledge that a tagged asset or person passed through a gate, doorway or some other tightly defined area. Immediate chokepoint detection is critical to closely monitor mustering progress and to control access to restricted/hazardous areas.

Accurate, reliable real-time location and presence detection
AeroScout provides true real-time location based on various advanced algorithms and technologies to ensure accurate location determination both indoors and outdoors.

Intrinsically Safe for explosion protection
AeroScout IS and explosion proof products are built to meet a variety of international regulatory requirements for explosion proof hardware in hazardous environments.

Intrinsically Safe T2 Tag

The AeroScout Intrinsically Safe T2 Tag is a small, long-life Wi-Fi-based Active RFID device that can be placed on any asset, allowing the AeroScout system to locate it. Features include:

- Enables the location of any person or high-value asset
- Accurate Real-Time Location as well as sophisticated RFID Chokepoint Detection
- Located by standard Wi-Fi Access Points, or AeroScout Location Receivers
- Work in both indoor and outdoor environments
- Compact size and flexible mounting options
- Call-button option for instant alerting
- Utilizes standard Wi-Fi network for communications
- Rugged, water and dust resistant enclosure

Intrinsically Safe T2 Tag Certifications:

- ATEX   II 1 G EEx ia IIB/IIC T4/T5/T6
       I M1 EEx ia
- FM   Intrinsically Safe
       Class I, II, III Division 1,
       Groups A,B,C,D,E,F,G
- MSHA   Approval No.23-A08006-0
- TIIS   Ex12057

Explosion Proof Zone 1 EX2000 Exciter

The AeroScout Explosion Proof Zone 1 EX2000 Exciter is a product that extends the AeroScout solution to provide immediate chokepoint detection and identification of AeroScout Tags, for a wide variety of applications. Exciters use low frequency signals to trigger tags as they pass through a doorway, tunnel or other defined area, for example, this could provide instant knowledge that a miner has entered an elevator shaft, a truck has driven through a gate, or a worker has moved into an unauthorized area. Features include:

- Accurate detection of AeroScout Tags at chokepoints
- Programmable coverage area to meet application needs, from 50cm to 6m radius
- Reprogram or modify tag behavior automatically
- Trigger alerts based on tag movement for security, inventory management and more

Explosion Proof Zone 1 EX2000 Exciter Certifications:

- ATEX   II 2 G EEx e mb II T4 Ta 60°C
- FM   Class I, Zone 1 AEx em IIC T4 Ta 60°C
       Class I, Division 2, Groups A,B,C,D T4 Ta 60°C

Explosion Proof Zone 1 Rugged Location Receiver

The AeroScout Explosion Proof Zone 1 Rugged Location Receiver enables accurate location determination in outdoor, wide-open environments using robust and sophisticated time difference of arrival (TDOA) measurement capabilities. The Location Receiver receives 802.11 Wi-Fi messages and executes radio signal measurements, enabling AeroScout Engine software to accurately calculate the location of AeroScout's Wi-Fi Tags mounted on any asset. Alternatively, standard Wi-Fi Access Points, available in explosion proof models, can be used depending on the application requirements and the environment. Features include:

- Locates any asset or person, using AeroScout Tags
- High-performance TDOA algorithm for accurate location determination
- Easy installation and setup

Explosion Proof Zone 1 Rugged Location Receiver Certifications:

- ATEX II 2(1) G Ex d [ia] IIC   T4 (Ta 65°C Max)
       T5 (Ta 55°C Max)
       T6 (Ta 40°C Max)

For more information on AeroScout Tags, Exciters and Location Receivers, please refer to their detailed product data sheets.

Ordering Information

For more information about capabilities and specifications of AeroScout Intrinsically Safe products, as well as ordering information, please contact AeroScout at info@aerosout.com.

Contact Info

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