AeroScout LF Exciters

Overview
The AeroScout LF Exciters are components of the AeroScout suite of enterprise visibility solutions for location-based applications. The Exciter’s robust and sophisticated RFID detection capabilities enables the AeroScout system to detect and manage AeroScout Tags at egress points and zone boundaries, or in other flow control situations.

Exciters transmit low frequency (LF) signals to trigger AeroScout Tags as they pass through an egress point or as they approach the exciter. The tags in turn transmit a Wi-Fi message to the AeroScout system, triggering a configured exciter event. The exciter can activate/deactivate the tags, program them, or even cause tags to operate in a desired way (for example, to blink).

Industry Benefits

Theft Prevention
Healthcare organizations or enterprises with expensive and mission-critical equipment can tag valuable assets that are intended to remain within a specified area. The AeroScout system can track the location of such tagged assets and trigger an alert when they pass through an exit point or enter a restricted area.

Automatic Inventory Management
Logistics organizations can update inventory records by automatically determining which assets are within the respective defined areas, thus ensuring real-time knowledge of inventory levels without manual checks or barcode scanning.

Real-Time Alerts
Based on the locations of assets, organizations across industries can use AeroScout Exciters to trigger automated events and alerts.

Security Applications
AeroScout Exciters can be installed to improve the safety level of employees and customers. When installed at the entrances of restricted areas, Exciters trigger alerts when unauthorized persons attempt to enter. Exciters can notify staff regarding a patient elopement event, such as a patient leaving the behavioral health department.

Key Features

RFID Detection of AeroScout Tags
Exciters trigger tags to transmit as they pass through a defined area in the exciter’s range, which is enough to cover a typical door or elevator.

Chaining
In a location where the required LF coverage exceeds the range of one exciter, multiple exciters can be connected together for complete and precise coverage of areas such as large doorways.

Accurate Location Detection
Exciters enable healthcare organizations to locate assets precisely, for example to a specific shelf, rack, room, bay or work cell. They can also assist in difficult searches for a particular asset by making the attached tag identify itself with a defined LED indication.

Tag Behavior Modification
AeroScout Tag behavior can be changed when a tag comes into range of an exciter. For example, a tag can be switched off when it leaves a defined area, thus extending its battery life. In addition, when the tag enters a new physical space, its transmission rate can be modified.

Supports real-time egress point detection for enhanced monitoring and identification

LF Exciter Functionality Highlights

- Deliver real-time alerts and egress point detection for improved operational efficiency
- Trigger alerts and events for instant egress point detection
- Leverage the same Wi-Fi tags that provide real-time location
- Automate egress point control
**Message Programming Functions**
Exciters can store messages on the tag for subsequent transmission. The message transmission can be triggered by other exciters, enabling sophisticated process control functions.

**Multiple Cabling Options**
AeroScout Exciters can support Power-over-Ethernet (PoE) or standard Ethernet to enable centralized programming, monitoring and updates by the AeroScout Engine. In addition, exciters can work in an offline mode disconnected from the network, eliminating the need for a physical network feed. In the offline mode, remote configuration and monitoring is not available.

**Exciter Software and Accessories**

**External Low Frequency (LF) Antenna Device**
The external LF antenna device, can be used as a secondary LF device connected to the exciter, extending the exciter's LF coverage. The exciter, and connected external LF antenna can help in detecting when a tag enters or exits a room. The exciter communicates and provides power to the external LF device via a standard CAT5 cable connection.

**Exciter Manager**
An application for configuring exciter IP addresses to facilitate their communication with the AeroScout Engine.

**Exciter Detector**
A handheld device for evaluating the coverage area of an exciter. It connects to a computer via a USB port and is configured using the Exciter Detector software.

**Exciter Synchronization Tool**
A tool for synchronizing exciters in cases such as bay/bed separation when exciters signal overlap can occur.

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### AeroScout Exciter and External LF Antenna Specifications

| Part Number | EX200B Exciter SKU: EX-2000B  
| EX3210 Exciter SKU: EX-3210  
| EX5000 Exciter SKU: EX-5000  
| External LF Antenna SKU: ANT-4200 |
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| Range | EX200B: 0.5 to 6 m (20 in to 20 ft)  
| EX3210: 0.25 m to 3 m (10 in to 10 ft)  
| EX5000: 0.5 m to 6.5 m (20 in to 21.3 ft)  
| Antenna: Adjustable: 0.25 m to 3 m (0.8 ft to 9.8 ft) |
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| Dimensions and Weight | EX200B: 220 mm (diameter) x 115 mm (depth) (8.7 in x 4.5 in ); 700 g (25 oz)  
| EX3210: 150 mm x 65 mm x 25 mm (5.9 in x 2.5 in x 1.0 in); 143g (4.9 oz)  
| EX5000: 180 x 155 x 45 mm (7.1 in x 6.1 in x 1.8 in); 450 g (16oz)  
| Antenna: 93 mm x 84 mm x 34 mm (3.7 in x 3.3 in x 1.3 in); 100 g (3.5 oz) |
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| Network Interface and Settings | Exciters: RJ-45  
| Antenna: RJ-45 Input Connector |
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| Electrical | EX200B: Input: 48 VDC, PoE (802.3af ) Max. power consumption: 6 W  
| EX3210: Input: 12 VDC, PoE (802.3af) Max. power consumption: 6 W  
| EX5000: Input: 48 VDC, PoE (802.3af) Max. power consumption: 8 W  
| Antenna Powered directly from the exciter, Max. power 6 W |
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<th>LF Channel</th>
<th>125 KHz, ASK Modulation</th>
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| Operating Temperature | EX200B/EX3210: -20 °C to +60 °C (-4 °F to 140 °F)  
| EX5000: 0 °C to +50 °C (32 °F to 122 °F)  
| Antenna: 0 °C to +50 °C (32 °F to 122 °F) |
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<th>Other</th>
<th>Antenna: When connecting to EX200B Exciter, requires a 48/12 V adapter</th>
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| Certification | EX200B/EX3210/EX5000: FCC Part 15, sub-part C class B, subnet B EN 300-330, EN 301-489 R55210 (Canada) EMC IEC60601-1-2 (Europe)  
| Safety: CE, cTUVus (EN60950) |
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