

Data Sheet:

Low Frequency Exciters

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

Overview

The AeroScout LF Exciters are components of the STANLEY Healthcare suite of enterprise visibility solutions for location-based applications. The Exciter's robust and sophisticated RFID detection capabilities enable the STANLEY Healthcare 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 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 STANLEY Healthcare 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 STANLEY Healthcare 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 exciters to trigger automated events and alerts.

Security Applications

Exciters can be installed to improve the safety level of employees and customers. If 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 the 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



LF Exciter Functional 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

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

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

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tag enters a new physical space, its transmission rate can be modified.

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

Exciters can support Power-over-Ethernet (PoE) or standard Ethernet to enable centralized programming, monitoring and updates by the Location 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 detect 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

This is an application for configuring exciter IP addresses to facilitate their communication with the Location 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 where exciter signal overlaps may occur.

STANLEY Healthcare LF Exciter and External LF Antenna Specifications

Part Number	<ul style="list-style-type: none"> EX2000B Exciter SKU: EX-2000B EX3210 Exciter SKU: EX-3210 EX5000 Exciter SKU: EX-5000 EX5200 Exciter SKU: EX-5200 External LF Antenna SKU: ANT-4200
Range	<ul style="list-style-type: none"> EX2000B: 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) EX5200: 1.5 m to 6.5m (4.9 ft to 21.3 ft) Antenna: Adjustable: 0.25 m to 3 m (0.8 ft to 9.8 ft)
Dimensions and Weight	<ul style="list-style-type: none"> EX2000B: 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); 865g (31 oz) EX5200: 245 x 200 x 60mm (9.6 in x 7.9 in x 2.4 in); 865g (31 oz) 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)
Network Interface and Settings	<ul style="list-style-type: none"> Exciters: RJ-45 Antenna: RJ-45 Input Connector
Electrical	<ul style="list-style-type: none"> EX2000B: 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 EX5200: Input: 24 - 48 VDC, PoE (802.3af) Max. power consumption: 6 W Antenna Powered directly from the exciter Max. power 6 W
LF Channel	<ul style="list-style-type: none"> 125 KHz, ASK Modulation
Operating Temperature	<ul style="list-style-type: none"> EX2000B/EX3210: -20 °C to +60 °C (-4 °F to 140 °F) EX5000, EX5200: 0 °C to +50 °C (32 °F to 122 °F) Antenna: 0 °C to +50 °C (32 °F to 122 °F)
Other	<ul style="list-style-type: none"> Antenna: When connecting to EX2000B Exciter, requires a 48/12 V adapter
Certification	<ul style="list-style-type: none"> EX2000B, EX3210, EX5000: FCC Part 15, sub-part C class B, subpart B EN 300-330, EN 301-489 RSS210 (Canada) EMC IEC60601-1-2 (Europe) EX5200: FCC part 15 sub-part B, ETSI 300.328, 300.330, ETSI 301.489 Safety: CE, cTUVus (EN60950)

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