



AeroScout EX3300 Exciters

User's Guide

EX3300-UG-221111-01

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Introduction

The AeroScout EX3300 Exciters series are key components of the AeroScout Hand Hygiene Solution. The EX3300 Exciters provide robust and sophisticated RFID detection capabilities, using the same AeroScout tags that can also be accurately located in real time by the AeroScout system.

The EX3300 Exciters are specialty designed to be embedded in Hand Hygiene dispenser. When a dispenser with an embedded EX3300 Exciter is activated, the Exciters trigger AeroScout's tags that are located near the Exciter and the tags in turn transmit a message to AeroScout Location Receivers or compatible Access Points in range. This provides instant acknowledgment that a tagged staff member has used the dispenser. The AeroScout Visibility System can detect, record and report the rate of usage of the dispensers per user and provides a revolutionary way for health care facilities to monitor the hand hygiene policy compliance of staff members.



Figure 1: Embedded EX3300 triggering a staff tag

EX3300 Features

Hand Hygiene Dispenser Integration

EX3300 Exciters are specially designed to be embedded in GOJO and Ecolab hand hygiene dispensers. The embedded exciter reacts to a dispenser activation and triggers all tags in range to transmit a message to a nearby access point.

RFID detection of AeroScout Tags

Triggering the tags to transmit as they enter a defined area, EX3300s reach up to a 6 meter (19.6ft) range, enough to cover typical door or gate areas.



Note

The exciters' effective range, based on specific environment and placement, may be less than the configured range. The effective range should be taken into consideration when planning and designing the deployment.

Tag behavior modification:

The EX3300 can wirelessly active and deactivate tags. Tag battery life can be extended further by switching the tags off when they leave a defined tracking area through a gate or doorway.

It is also possible to configure the Exciter to change of tag transmission rate temporarily or indefinitely to accommodate different usage patterns in various physical spaces.

Message Programming functions

The EX3300 has the ability to store messages on the tag for later transmission. Message transmission can later be triggered by other EX3300s, enabling sophisticated process control functions.

EX3300 can trigger a tag to:

- Transmit up to 15 bytes of data sent to it by the EX5100;
 - Transmit one of 15 pre-stored messages;
 - Transmit and store up to 15 bytes of data sent to it by the EX5100.
-

EX3300 Models

The AeroScout EX3300 is an offline exciter designed to integrate with the following dispenser models:

	TFX Touch Free Dispensers	Order Number
	PURELL TFX Touch Free Dispenser	EX-3300-PRL
	EcoLab Touch-Free Dispenser	EX-3300-ELB

Mounting the Exciter

Follow these steps to install an EX3300 in a Hand Hygiene dispenser:

1. Open the dispenser by
- 2.



Note

The EX-3300 Exciter may not be inserted into any host units other than the ECOLAB Hand Sanitizer Dispenser or the GOJO Hand Sanitizer Dispenser.

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Adding the Exciters to the AeroScout Engine

Follow these steps:

1. Do one of the following:
 - In a Cisco-based configuration, add the Exciters via WCS.
 - If you are using AeroScout Standalone Engine, add the Exciter via System Manager.
2. Access System Manager and perform the following steps for each one of the Hand Hygiene Exciters:
 - a. In the **Configuration** menu select **Advanced Mode**.
 - b. Access the Exciter properties by double-clicking the Exciter's icon.
 - c. In the **Exciter Modules** window click on **Internal LF Exciter** and select the **Settings** tab.
 - d. In **HW ID**, enter the Exciter ID. See Figure 2.



Note

If the ID is already taken by another Exciter, and the Exciter is reachable (not offline), the system automatically switches IDs between the two Exciters. If the Exciter is unreachable, change the ID manually.

- e. Click **OK**.
-

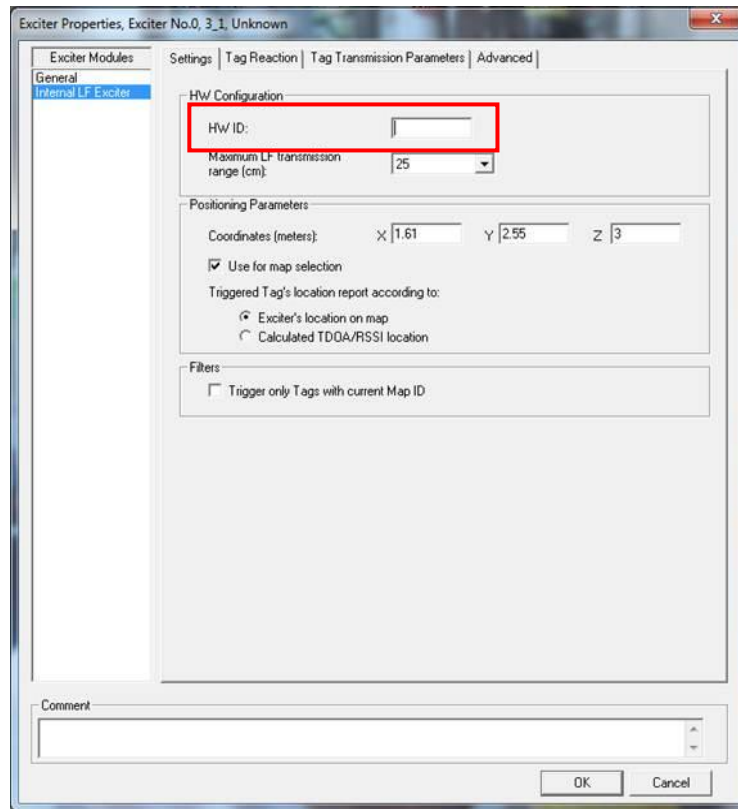


Figure 2: Entering an Exciter ID in System Manager

- f. Make sure all dispenser Exciters appear offline on the map 

Advanced Configuration

Advanced configuration an EX3300 Exciter is done via the AeroScout Exciter Manager. The Exciter Manager enables configuring the Exciter's Maximum Transmission Range, Exciter ID, and IP address.

The EX3300 Exciters are equipped with a customized serial cable used to configure the Exciter via the Exciter manager.

For more instructions on configuration the EX3300, please refer to the AeroScout Exciter Manager User Guide.



Figure 3: Customized EX3300 Serial Cable

EX3300 Family SKUs

Product Name	SKU	Description
EX3300 Integrated Exciter	EX-3300	Includes Exciter board (no housing) for embedding into devices. Doesn't include the integration connector on the board.
EX3300 Integrated Exciter with Connector	EX-3300-CN	Includes Exciter board (no housing) for embedding into devices. The integration connector is assembled on the board
EX3300PRL Hand Hygiene Exciter	EX-3300-PRL	EX3300 Integrated Exciter for Purell TFX SmartLink Dispenser. Exciter is shipped embedded inside a complete dispenser. Should be ordered only in the case of deployments that require new dispensers. (e.g. facilities without dispensers or those that are replacing manual dispensers)
EX3300PRV Hand Hygiene Exciter	EX-3300-PRV	EX3300 Integrated Exciter for Provon TFX SmartLink Dispenser. Exciter is shipped embedded inside a complete dispenser. Should be ordered only in the case of deployments that require new dispensers. (e.g. facilities without dispensers or those that are replacing manual dispensers)
EX3300PRS Hand Hygiene Exciter	EX-3300-PRS	EX3300 Integrated Exciter for Purell Surgical Scrub TFX SmartLink Dispenser. Exciter is shipped embedded inside a complete dispenser. Should be ordered only in the case of deployments that require new dispensers. (e.g. facilities without dispensers or those that are replacing manual dispensers)
EX3300ELB Hand Hygiene Exciter	EX-3300-ELB	EX3300 Integrated Exciter for EcoLab Touch-Free Dispenser. Exciter is shipped embedded inside the dispenser.
EX3300PRL Hand Hygiene Exciter for Dispenser Retrofit	EX-3300-PRL-RT	EX3300 Integrated Exciter for Purell TFX SmartLink Dispenser. Exciter is shipped with a pump house to retrofit an existing dispenser.
EX3300PRV Hand Hygiene Exciter for Dispenser Retrofit	EX-3300-PRV-RT	EX3300 Integrated Exciter for Provon TFX SmartLink Dispenser. Exciter is shipped with a pump house to retrofit an existing dispenser.
EX3300PRS Hand Hygiene Exciter for Dispenser Retrofit	EX-3300-PRS-RT	EX3300 Integrated Exciter for Purell Surgical Scrub TFX SmartLink Dispenser. Exciter is shipped with a pump house to retrofit an existing dispenser.

EX3300 Specifications

Physical and Mechanical (with the housing)

- Dimensions: 74 x 50 x 44 mm (2.9in x 1.97in x 1.8in)
- Weight: 32g (1.13oz)

Coverage

- Adjustable coverage range up to 2m (6.6ft) by intervals of 0.25m (0.83ft)

LF Channel

- 125kHz
- Field intensity limits: 37.3dB μ A/m at 10m (ETSI)
- Propagation limits: 21.8dB μ V/m at 300m (FCC)
- Modulation: ASK

Power

- Input voltage:
- GOJO 4.5V
- Ecolab 6V
- Maximum power consumption: 2W

Environmental

- Operating temperature: 0 to 50 °C (32°F to 122°F)
- Humidity: 0 to 95%, non-condensing

Certifications

- EMC Certifications
 - US standard: FCC part 15
 - European standard: ETSI 300.328, 300.330, ETSI 301.489
 - Canada: RSS 210
 - EMC standard for healthcare: IEC 6100 / EN 60601
 - Japan : ARIB per demand
-

- Australia : C-tick per demand
- Korea : MIC per demand
- Safety Certifications
 - US – cTUVus: UL 60950
 - Europe – CE mark: EN 60950



WARNING: Insertion of an EX-3300 Exciter into any host other than the ECOLAB Hand Sanitizer Dispenser or the GOJO Hand Sanitizer Dispenser invalidates the FCC ID authorization and Industry Canada certification of the EX-3300 Exciter.

WARNING: This device complies with Part 15 of the FCC Rules and RSS-210 of Industry and Science Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC STATEMENT:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- d) Consult the dealer or an experienced radio/TV technician.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- a) This device may not cause harmful interference
- b) This device must accept any interference received, including interference that may cause undesired operation.

FCC Warning

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

About AeroScout

AeroScout is the market leader in Unified Asset Visibility solutions. Clients improve operational efficiency and quality using AeroScout products that leverage standard Wi-Fi networks to track and manage the location, condition and status of mobile assets and people. AeroScout's global customer base consists of leading hospital, manufacturing and logistics organizations, including many of the Fortune 500. The company originally invented the first Wi-Fi-based Active RFID tag, and today is widely recognized as leading the market in number of deployments and tags shipped. Headquartered in Redwood City, Calif., AeroScout has offices in Europe, Asia, the Middle East, Latin America and Australia. For more information, please visit www.aeroscout.com.

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