5-ETC00433C

ETC Multi-purpose RFID Tag

Elpas
Active RFID Solutions

Installation Notes

INTRODUCTION

Elpas ETC Tags from Visonic Technologies are miniature, unified active long-range Radio Frequency multi-purpose local positioning (RFID) and infrared devices. ETC tags are designed for asset or people idententification and tracking; or emergency and protection signaling.

ETC tags are attached to an asset for tracking and monitoring. The tags will generate an alarm if the asset is moved to a prohibited location (such as an exit) or if an attempt is made to remove the tag sfrom the asset.

ETC Tags transmits periodic RF based status messages at 433MHz as well as optional infrared signals. These signals are received by Elpas readers installed throughout the indoor facility. Eiris software is used to continuously monitor the location and status of the tag.

Elpas LF Exciters transmit an RF based ID at 125KHz creating a field 3 meters in radius. When an ETC enters the LF field, the tag detects the LF message and transmits a special message indicating its entry into the field. This feature is used to warn when an attempt is made to remove an asset from its designated area. Other special messages are transmitted when the tag's button is pressed or when the tag is tampered with.

SPECIFICATIONS

Technology: IR, RF & LF
Power Source: One 3V lithium battery, CR 2430
Battery Life: 1.5 years assuming movement 1 hour per day
Transmission Rate:
- **IR (motion / stationary)**: Every 15 sec/10 min
- **RF (motion / stationary)**: Every 10 sec/10 min
- **RF Transmission Rate upon entry to LF area:**
  Burst of 4 RF transmissions(each transmission about 2ms in duration), approxamately 0.4 secs apart.

Indicators: Green LED indicates tranmission.
     Red LED indicates button press.
Tamper Sensor: Functions on light or dark surfaces
Tamper Sensor Transmission Rate: 4 IR/RF transmissions (each transmission about 2ms in duration), 400 ms apart

Button Press / Button Release Transmission Rates:
- **On Button Press:** 4 IR/RF transmissions (each transmission about 2ms in duration), 400 ms apart.
- **On Button Release**: 4 IR/RF transmissions (each transmission about 2ms in duration), 400 ms apart.

Badge ID: Unique factory programmed ID
Dimensions: 34x40x15 mm (1.3 x 1.6 x 0.6 inches)
Weight (assembled): 20 grams (0.75 ounces)
Operating Temperature: 10°C to 70°C (14°F to 159°F)
Housing: IP64 water rated enclosure
Saftey Compliance: EN 300 220-3
FCC Compliance: FCC Part 15.231 Level C
FCC ID: GSA ETC00433 (433.92 MHz)
Warranty: One year limited warranty (excluding battery)

INSTALLATION INSTRUCTIONS

1. Remove the protective layer from the double-sided adhesive on the back of the mounting bracket (Figure 1).
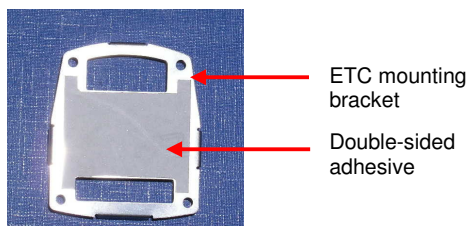

ETC mounting bracket

Double-sided adhesive

Figure 1: ETC Mounting Bracket (front view)

2. Carefully position the mounting bracket on the asset to be tagged (narrow side on top, wider side at the bottom).

   Note: It is recommended to place the ETC on light colored surfaces. Dark surfaces may require the addition of a white sticker placed between the surface and the tag.

3. Place the ETC in the mounting bracket and click it into place such that the wide/narrow sides correspond to the shape of mounting bracket (Figures 2, 3 , 4 and 5).

ETC Tags on Laptop Computers

The ECT tag should be positioned on the top right corner of the latop lid. If the tag is attached towards the center of the lid, the RF performance will be significantly degraded, reducing the detection rangeof the tag.

Figure 2: ETC Tag (front view)

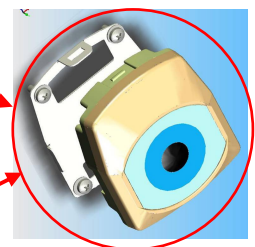**Figure 3: ETC Mounting Bracket (front view)**

Figure 4: Attaching Tag to Mounting Bracket

Red / Green LEDs (button press / transmission)

ETC tag button

ETC Tag mounting bracket (clip)

Figure 5: ETC Tag (in mounting bracket)

4. To remove the tag from the mounting bracket, use a small flat-head screwdriver to release the clip that holds the tag in place (Figure 5).

5. To reattach the tag, repeat steps 3 and 4.

Visonic Technologies
Enterprise Protection Solutions