# Asset Tag - User Manual



# Description

The asset tag is a long life, cost-effective proximity tag with multiple mounting options. The asset tag is intended to be attached an asset by the methods outlined in this user manual.

# **Safety Recommendations**

Failure to follow these safety instructions could result in fire, electric shock, or other injury or damage.

Do not disassemble, dismantle, open, crush puncture, or shred the product.

If the product housing/envelope is weakened, cracked, or broken, stop using it immediately.

Do not attempt to short-circuit the battery or make contact with a conductive/metal object.

Do not expose the product to heat, fire or flame.

Only CR2450 batteries can be used in this product.

Keep out of reach of children.

Dispose of all batteries in accordance with applications laws and regulations.

Failure to follow these instructions can result in personal injury or property damage, and the manufacturer will have no liability whatsoever for any such injury or damage arising from or in connection with any failure to follow these or other instructions provided to the end user.
Le non-respect de ces instructions peut entraîner des blessures corporelles ou des dommages matériels, et fabricant décline toute responsabilité en cas de blessure ou de dommage résultant de ou en relation avec le non-respect de ces instructions ou d'autres instructions fournies à l'utilisateur final.

## **Product Description**

The product is designed to track and locate assets.

Asset Tag Features and Sensors:

- 2.4 GHz radio
- CR2450 battery
- (3) LEDs
- Attach to equipment using zip tie through eyehole or two-sided adhesive.
- Accelerometer and temperature sensors

The product has the following exterior dimensions: 44.5 mm x 29 mm x 7 mm.



## Back Label

The sticker on the back of the device provides the main product information.



The TAG ID is necessary to provision the device. This information is encoded in the QR code.

Do not remove the label or other proprietary notices or logos affixed to the device.

Ne retirez pas l'autocollant ou d'autres mentions de propriété ou logos apposés sur l'appareil.

### Characteristics

Listed below are the main performance characteristics:

Features	Description
Use	Indoor Only
LED	Thee (3), Red
Usage	Continuous
Power	CR2450 Battery Only
Internal supply	3V DC

Features	Description
Relative humidity environment	Less than 95% non-condensing humidity
Frequency band	2.4GHz ISM Band
Max Output power	+4Bm conducted
Operating temperature	From -30°C to + 60°C noncondensing
Storage temperature	From 0°C to +35°C noncondensing <sup>1</sup>
Mechanical dimensions (in millimeters)	44.5 mm x 29 mm x 7 mm
Temperature Measurement	Range: -30°C to + 60°C
	Precision: +/- 1°C
Humidity Measurement	Absolute accuracy tolerance: +/- 3 %RH over 2080%RH at 25°C Full relative humidity scale temperature range: 0 to 60°C Long Term stability: +/-0,5 %RH/year
Accelerometer	Configurable range :±2/±4/±8/±16 g Resolution: 1mg Sampling rate: 0, 1.6, 12.5, 26, 52, 104, 208, 416, 833, 1660, 3330, 6660 Hz

# Installing the Tag

The product is designed to have a small footprint and be attatched to customer equipment objects using the provided 3M adhesive or zip tie using the keyhole on the deivce.

### • Adhesive

Before adhering the device to the asset surface, clean it using an 50/50 mixture of isopropyl alcohol and water can remove dust and oils on the surface to prep for good adhesion.

Ideal application temperature range for adhesive application is 70°F to 100°F (21°C to 38°C) but as low as 32°F (0°C) is acceptable. The adhesive will bond to a broad range of high surface energy substrates including metals, glass, plastics and easier to bond paints.

<sup>&</sup>lt;sup>1</sup> The indicated storage temperature range is intended to maximize the battery life and avoid unexpected discharge during storage. The product can be exposed to an increased temperature range than the indicated storage temperature range (as long as it stays within operating temperature range), but exposure to more extreme temperatures during storage may reduce battery life.

<sup>&</sup>lt;sup>1</sup> La plage de température de stockage indiquée est destinée à maximiser la durée de vie de la batterie et à éviter une décharge inattendue pendant le stockage. Le produit peut être exposé à une plage de températures plus élevée que la plage de températures de stockage indiquée (tant qu'il reste dans la plage de températures de fonctionnement), mais une exposition à des températures plus extrêmes pendant le stockage peut réduire la durée de vie de la batterie.

- 1. Using included Tag double-sided adhesive, remove one side of the protective film and secure it to the blank side of the Tag
  - a. Avoid obscuring Tag QR code
- 2. Remove the other of side of the protective film and apply securely to the asset

### • Zip Tie

- 1. Separately, procure zip tie
- 2. Loop zip tie through keyhole on Asset Tag and connect to the asset

### • Activation

- 1. Pull the battery tab to turn on Tag
- 2. Using asset tracking software,
  - a. Scan Tag QR code or manually enter Tag ID
  - b. enter asset information
  - c. Confirm successful pairing by pressing SUBMIT

### • Button & LED Behavior

#### LED Blink Rate:

Fast Blink (0.1 seconds each)	Atypical Activity	
Slow Blink (1.0 seconds each)	Normal Activity	

#### **LED Actions:**

Device Action	LED	Blink Count
Powered Off	N/A	N/A
Power On		2
Firmware Update		10

## **Regulatory Notices**

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operation of this device is restricted to indoor use only.

## Compliance with 47 CFR Part 15 Regulation Class B Devices

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. 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 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:

- Reorient or relocate the product.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **ISED** Notice of Compliance

#### CAN ICES-3(B) / NMB-3(B)

This Class B digital apparatus complies with Canadian ICES-003.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

-This device may not cause interference.

 This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;

2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Avis de conformité aux normes d'Industrie Canada (IC).

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. Son exploitation est autorisée aux deux conditions suivantes:

-il ne doit pas produire de brouillage; et

-il doit accepter tout brouillage radioélectrique subi, même si celui-

ci est susceptible d'en compromettre le fonctionnement.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Avertissement: les changements ou modifications apportés à cet appareil non expressément approuvés par la partie responsable de la conformité peuvent annuler le droit de l'utilisateur à faire fonctionner l'équipement.