

# Hardened Transportation Tag

## AT5413 and AT5415

TransCore's Hardened Transportation Tag is a 915MHz, beam-powered radio frequency identification (RFID) tag. Packaged in a factory-sealed case, this tag is ideal for mounting on vehicle chassis, intermodal containers, or any environment requiring a durable, weatherproof tag.

The Hardened Transportation Tag is beam-powered, requiring no internal battery. In addition to giving the tag an unlimited service life, this feature limits the tag's range and reduces the possibility of cross-reads from nearby tags.

The tag can be factory-programmed, as specified by the customer, or can be user-programmed in the field using TransCore's suite of RF tag programmers.

When used with TransCore readers, security features prevent data corruption, data alteration, and tag cloning. The Hardened Transportation Tag supports factory locked data fields for Tag ID, customer, and user information. This tag also supports open data fields that can be written by the agency.



## Features

- ▶ Supports American Trucking Associations (ATA) and Super eGo® (SeGo) protocols
- ▶ Non-battery for extended service life
- ▶ Read/write capability in SeGo mode
- ▶ Weather resistant case
- ▶ Factory-sealed case

## Applications

- ▶ Vehicle chassis
- ▶ Intermodal containers
- ▶ Harsh environments
- ▶ Rail Automatic Equipment Identification (AEI)
- ▶ Train positioning

# Hardened Transportation Tag

## COMMUNICATIONS

### Frequency Range

902 to 928MHz

### Typical Working Range

5 to 10ft (1.5 to 3m)

Range depends on system parameters

### Polarization

Parallel with longer side

## SOFTWARE FEATURES

### Data Memory

**ATA Mode:** 60 bits half frame  
120 bits full frame

**SeGo Mode:** 2,048 bits

User memory programmable using RF link

## POWER REQUIREMENTS

### Power Source

Beam powered

## LIFE EXPECTANCY

### Service Life

Unlimited

## PHYSICAL

### Dimensions

**Size:** 9.3 x 2.38 x 0.69in (23.6 x 6.05 x 1.75cm)

**Weight:** 5.3oz (150.3g)

### Case Material

Weatherproof, sealed, UV-stabilized, gray case

### Mounting Surface

Any smooth metal surface

If mounting surface is non-metallic or irregular, tag must be mounted to a metal backplate attached to the surface of the vehicle or object to be tagged

### Mounting Method

**Rivet Mounting:** Tag must be mounted directly to any smooth metal surface using blind rivets or TIR-approved fasteners

## ENVIRONMENTAL

### Operating Temperature

-40°F to +185°F (-40°C to +85°C)

### Storage Temperature

-67°F to +212°F (-55°C to +100°C)

### Humidity

100% relative humidity, condensing

### Vibration

20 G<sub>rms</sub>, 20 to 2000Hz

### Shock

200G, half-sine pulse, 3ms duration, 3 axes

### Compatibility

**ATA Mode:** American Trucking Associations standard

**Super Ego Mode:** SeGo

## STANDARDS

AREMA 11.5.1 Class A (Trackbed)

Ultraviolet (UV Exposure MIL-STD 810-D, Method 505.2: 10 years of Florida-level UV radiation

Dust Ingress/Water Immersion: IP67 (≤1m of immersion

## PROGRAMMING

Can be programmed to your specifications at the factory, or programmed by the user in the field, using TransCore's suite of RF tag programmers

## MODEL PART NUMBER

13-5413-NNN Full Frame

13-5415-NNN Half Frame

For more information:

**Sales Support**

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**Technical Support**

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[transcore.com](http://transcore.com)

