

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_{rms}, 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

800.923.4824

Technical Support

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transcore.com

