High-Temperature
Transportation Tag
AT5133

The AT5133 High-Temperature Transportation Tag is a full frame, 915MHz, beam-powered radio frequency identification (RFID) tag. Packaged in a factory-sealed case, this tag is ideal for mounting on rail cars, vehicle chassis, intermodal containers, or any environment requiring a durable, weather-resistant tag.

For environments subject to occasional high temperatures, such as those found in railroad thaw sheds, the tag's reflective and heat-resistant outer coating can survive short-term heat exposure up to 350°F (177°C).

The AT5133 High-Temperature 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 AT5133 High-Temperature 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 Association of American Railroads (AAR), American Trucking Associations (ATA), and Super eGo® (SeGo)

▶ Beam-powered for extended service life

▶ Read/write capability in SeGo mode

▶ Weather-resistant and heat-resistant factory-sealed case

Applications

▶ Vehicle chassis

▶ Intermodal containers

▶ Harsh environments

▶ Rail Automatic Equipment Identification (AEI)

▶ Train positioning

TRANSCORE®
Trusted Transportation Solutions

AT5133 High-Temperature 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: 120 bits
SeGo Mode: 2,048 bits
            1088 bits (AAR)

User memory programmable using RF link

POWER REQUIREMENTS

Power Source
Beam-powered

LIFE EXPECTANCY

Service Life
Unlimited

PHYSICAL

Dimensions
Size: 9.3 x 2.39 x 0.69in (23.6 x 6.07 x 1.75cm)
Weight: 6.2oz (176g)

Case Material
Weather-resistant, factory-sealed case. Heat/chemical-resistant silver coating will survive up to 45-minute exposure at 350°F (177°C). Tag electronics are not warranted to survive at this temperature.

Mounting Surface
Any smooth metal surface

If mounting surface is non-metallic or irregular, tag must be mounted to a metal backplate

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
2 G_{rms}, 10 to 200Hz

Shock
30G, half-sine pulse, 6ms duration, 3 axes

STANDARDS

Meets AAR standards for AEI

Compliant with ISO 10374 and ATA standards

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

13-5133-NNN

For more information:

Sales Support
800.923.4824

Technical Support
505.856.8007

transcore.com

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