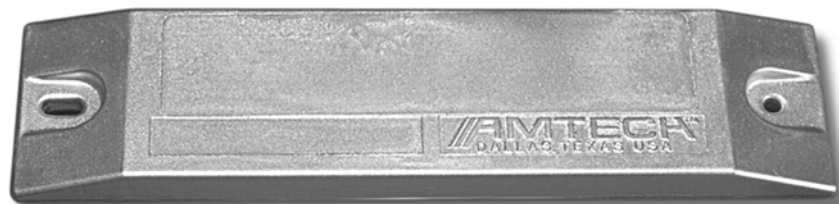## FEATURES

- **Harsh-environment durability**

- **Heat-resistant coating**

- **Factory-programmed or field-programmable**

- **120-bit data storage**

- **Beam-powered for unlimited service life**

- **Compatible with multiple Amtech-brand reader systems**

AT5125 Transportation Tag

The AT5125 Transportation Tag is a beam-powered field disturbance device used in 915 MHz radio frequency (RF) band applications. The AT5125 tag is ideal for mounting on vehicle chassis, intermodal containers, railcars, or in any environment requiring a durable, weatherproof tag. The tag's reflective outer coating improves its resistance to heat, making it ideal for use in environments subject to occasional high temperatures such as those found in railroad thaw sheds.

The tag can be factory-programmed, as specified by the customer, or user-programmed in the field using the AP4110 Programmer. It stores up to 20 six-bit alphanumeric characters of data (120 bits). TransCore provides a polycarbonate plug with O-ring with each unprogrammed tag to seal the tag's access port after field programming.

The AT5125 Transportation Tag has an unlimited service life because a small portion of the RF signal continually energizes the tag's circuitry. This limits the tag's range, which reduces competition with other nearby tags and enhances system discretion within a 2- to 10-foot (0.6- to 3-meter) diameter reading area.

The AT5125 Transportation Tag contains electronically programmable circuitry activated by the RF beam, which is broadcast by a system antenna. The tag encodes the signal received from an Amtech®-brand reader system with an identification number or a data message. The encoded signal reflects back (backscatters) to the Amtech reader system. TransCore's Amtech-brand readers — series AI1200, AI1300, AI1400, and AI1600 — can read the AT5125 tag.

AT5125 Transportation Tag

COMMUNICATIONS

Frequency Range
902 to 928 MHz

Typical Working Range
5 to 10 ft (1.5 to 3 m)

Range depends on system parameters.

Polarization
Parallel with longer side

SOFTWARE FEATURES

Data Capacity
Up to 20 six-bit alphanumeric characters
(120 available bits)

POWER REQUIREMENTS

Power Source
Beam powered

LIFE EXPECTANCY

Service Life
Unlimited

PHYSICAL

Dimensions
Size: 9.3 x 2.38 x 0.73 in
(23.6 x 6.0 x 1.87 cm)

Weight: 7.3 oz (210 g)

Case Material
Weatherproof, UV-stabilized case, sealed
with a snap-in removable plug and O-ring

Tag case material will survive 45-minute
exposure at 350°F (+177°C). Tag electronics
may not, and are not warranted to, survive
this temperature.

Mounting Surface
Metallic

If mounting surface is nonmetallic or
irregular, the AT5125 Transportation Tag
may be mounted to a metal backplate
attached to the surface of the vehicle or
object to be tagged.

Mounting Method
May be mounted directly to any smooth
metal surface using blind rivets or TIR-
approved fasteners.

Impact Resistance
168 in-lb

ENVIRONMENTAL

Operating Temperature
-40°F to +185°F (-40°C to +85°C)

STANDARDS
The AT5125 Transportation Tag meets the
standards for automatic equipment
identification set by the Association of
American Railroads (AAR) and by the China
Ministry of Railways.

OPTIONS

Factory Programming
Transportation tags may be programmed to
customer specifications by TransCore at the
factory.

Ultrasonic Seal
Factory-programmed transportation tags
can be custom-ordered with the
programming port ultrasonically sealed.

Tape Mount
The AT5125 Transportation Tag can be
ordered with double-sided tape attached.

Removable Plug
For reprogramming tags, order the
removable plugs with O-ring for a
weathertight seal of the programming port.
Sold in units of 50.

ACCESSORIES

AP4110 Programmer
The AT5125 Transportation Tag may be
programmed in the field using the AP4110
Programmer. The AP4110 Programmer
programs the tag through the programming
port located on the back surface of each tag.

Plug Removal Tool Kit
When reprogramming of Amtech-brand
transportation tags is required, the AS8003
Plug Removal Tool Kit cleanly and easily
extracts the existing plug and O-ring
without damaging circuitry or programming
port contact surfaces. Order replacement
removable plugs with O-rings prior to
reprogramming transportation tags.

For product information call: 1.800.923.4824 or 972.733.6600 (outside the U.S.) Fax 972.733.6486

www.**transcore**.com