TRANSCORE

PRODUCT PROFILE

AT5125 Transportation Tag

FEATURES

- **Ideal for mounting on vehicle chassis, intermodal containers, railcars, or in any environment requiring a durable, weathertight tag**
- **Stores up to 20 alphanumeric characters (120 data bits) that can be programmed either at the factory or in the field using the AP4110 programmer**
- **Indefinite service life because circuits are energized by a small portion of the RF signal**
- **Uses the RF beam to energize tag circuitry, which limits tag range. Reduces competition with other tags in nearby areas and enhances system discretion within 0.6 to 3 m (2 to 10 ft) diameter reading areas**

The AT5125 Transportation Tag is a beam-powered field disturbance device used in 915 MHz band applications. The AT5125 is ideal for applications involving exposure of the tag to harsh environmental conditions subject to occasional high temperatures such as those found in railroad thaw sheds.

The AT5125 contains electronically programmable circuitry activated by the RF beam that is broadcast by a system antenna.

The AT5125 encodes the signal received from an Amtech® reader system with an identification number or a data message. The encoded signal is reflected (backscattered) back to the Amtech reader system.

A high-temperature-resistant plug with O-ring is provided with each unprogrammed tag to seal the AT5125's access port after field programming.

The AI5125 can be read by AI1200, AI1300, AI1400, and AI1600 series readers.

SPECIFICATIONS

AT5125 Transportation Tag

COMMUNICATIONS

Frequency Range
902 to 928 MHz

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

Range depends on system parameters.

Polarization
Parallel with longer side

SOFTWARE FEATURES

Data Capacity
Up to 20 six-bit alphanumeric characters (128 actual bits, 120 user bits)

POWER REQUIREMENTS

Power Source
Beam-powered

LIFE EXPECTANCY

Service Life
Indefinite

PHYSICAL

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

Weight: 210 g (7.3 oz)

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

Mounting Surface
Metallic

Where mounting surface is non-metallic or irregular, the AT5125 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°C to +85°C
(-40°F to +185°F)

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

STANDARDS

AAR Compatible
The AT5125 meets the criteria for tag configuration and performance established in the Association of American Railroads' standard for automatic equipment identification.

OPTIONS

Factory Programming
Transportation tags may be programmed to your specifications by Amtech at the factory.

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

Tape Mount
The AT5110 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

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

AP4110 Programmer
The AT5125 may be programmed in the field using the AP4110 programmer. The AP4110 contains serial interface logic for connection to a PC host. The AP4110 programs and verifies Amtech RFID tags through the programming port located on the reverse surface of each tag.

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

www.**transcore**.com

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