**AA3233-003**

Subway Antenna

**Features**

- Constructed for high shock and vibration environments
- Rugged weatherproof enclosure that provides protection from harsh environmental conditions encountered on railroad tracks
- Dimensions are compatible with standard rail and rail tie spacings. Its low profile is well below accepted heights for track-mounted equipment.

The AA3233-003 Subway Antenna is a rugged 915 MHz antenna specifically designed for the rail industry. The antenna is designed for mounting between track rails. The antenna’s optimal performance is achieved when used with a TransCore AT5000-series transportation tag mounted to the underside of rail vehicles. The AA3233-003 operates with a TransCore radio frequency (RF) module.

The AA3233-003 is provided with all-weather isolators that dampen shock and vibration. The design features a heavy aluminum back plate and a watertight conduit junction box.

The AA3233-003 has a read pattern that is designed to read an AT5000-series transportation tag at close distances of 45 cm to 90 cm (17.7 in. to 35.4 in.) and at high speeds of 120 km/hr (74.56 mph).

The AA3233-003 is provided with mounting hardware and a full-size mounting template. The installation guide, available at transcore.com, includes detailed installation instructions.
AA3233-003 Subway Antenna

**COMMUNICATIONS**

**Frequency Range**
902 to 928 MHz

**Gain (peak, near field)**
10 dBi

**Polarization**
Linear

**VSWR**
< 2.0:1

**Impedance**
50 ohms nominal

**HARDWARE FEATURES**

**Connector**
N-type female and jam nut connectors inside waterproof box

**PHYSICAL**

**Antenna Dimensions**
Size: 26.9 x 4.9 x 11.25 in. (68.8 x 12.5 x 28.8 cm)
Overall Length: 34 in. (85.4 cm)

**Junction Box Dimensions**
Size: 6.1 x 5.3 x 2.2 in. (15.5 x 13.5 x 5.6 cm)
Size does not include mounting flange

**Enclosure**
Weatherproof radome

**ENVIRONMENTAL**

**Operating Air Temperature**
-40°F to +167°F (-40°C to +75°C)

**Humidity**
100% condensing

**Vibration Tolerance**
4 Grms, 5 to 1500 Hz, flat random spectrum

**Shock Tolerance**
10 G zero to peak x 7 ms
Isolated from 100 G, high-frequency, wheel shocks

Antenna Field Patterns