Features

► Constructed for high shock and vibration environments
► Rugged weatherproof enclosure
► Dimensions compatible with standard rail and rail tie spacings

The AA3235 Rail Antenna is a rugged 2450 MHz antenna specifically designed for the rail applications. Its rugged weatherproof enclosure provides protection from harsh environmental conditions encountered in rail environments. The AA3235 Rail Antenna is mounted to the undercarriage of a railcar.

The antenna’s optimal performance is achieved when used with the Amtech®-brand AT5510 Transportation Tag mounted to the underside of rail vehicles. The antenna operates with TransCore’s Amtech-brand AR2602 or AR2603 Radio Frequency Module.

The AA3235 Rail Antenna has a pattern that is designed to read the AT5510 Transportation Tag at distances of 17.7 to 35.4 inches (45 to 90 centimeters).

The AA3235 Rail Antenna is not provided with mounting hardware for final installation. The mounting hardware must be supplied by the systems integrator or installer.
## AA3235 Rail Antenna

### COMMUNICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>2400 to 2500 MHz</td>
</tr>
<tr>
<td>Gain</td>
<td>10 dBi</td>
</tr>
<tr>
<td>Polarization</td>
<td>Linear</td>
</tr>
<tr>
<td>VSWR</td>
<td>&lt;2.0:1</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 ohms, nominal</td>
</tr>
</tbody>
</table>

### HARDWARE FEATURES

**3 dB Beam Width**
- 120° in E-plane and 90° in H-plane

**Connector**
- N-type socket, jam nut

### PHYSICAL

**Antenna Dimensions**
- **Size:** 26.9 x 2.3 x 11.25 in. (68.8 x 5.9 x 28.8 cm)
- **Overall Length:** 34 in. (85.4 cm)
- **Weight:** 16.4 lbs (7.64 kg)

### ENVIRONMENTAL

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

**Humidity**
- 100% condensing

**Vibration Tolerance**
- 4 G$_{rms}$, 5 to 500 Hz

**Shock Tolerance**
- 30 G peak x 2 ms

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For more information:
Call **214.461.6443** (Sales Support) • **505.856.8007** (Technical Support)

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