# **AA3233**

## On-Board Heavy Rail Antenna

TransCore's AA3233 915MHz Heavy Rail Antenna is a rugged, reliable antenna specifically designed for mounting to train undercarriages.

Constructed for high shock and vibration environments, the IP65/67 rugged weatherproof enclosure provides protection from harsh environmental conditions encountered in railroad applications.

The AA3233 is available with or without an integrated check tag. When paired with TransCore's AT5000-series transportation tags, the AA3233 Heavy Rail Antenna can read rail transponders at speeds up to 75 mph (120km/hr).

The AA3233 includes a strain relief kit to provide better coaxial cable durability when used in bogie mount applications.



### **Features**

- Constructed for high shock and vibration environments
- ▶ IP65/67 rugged weatherproof enclosure
- Available with or without integrated check tag
- Corrosion and chemical resistant
- Strain relief kit for high vibration applications

### **Applications**

- Train positioning
- ► Rail Automatic Equipment Identification (AEI)



## AA3233 On-Board Heavy Rail Antenna

#### **COMMUNICATIONS**

#### **Frequency Range**

902 to 928MHz

#### Gain (peak, near field)

10 dBi

#### **Polarization**

Linear, parallel with longer side

#### **VSWR**

<2.0:1

#### **Impedance**

50 ohms nominal

#### **Beamwidth**

E-Plane: 33° H-Plane: 80°

#### **HARDWARE FEATURES**

#### **Connectors**

**Antenna:** right angle N-type female **Checktag option:** receptacle, jam nut

#### **PHYSICAL**

#### **Dimensions**

Size:  $68.2 \times 28.6 \times 8.7$ cm ( $26.9 \times 11.3 \times$ 

3.4in)

Weight: 7.64 kg (16.4 lbs)

#### **Enclosure**

IP65/67

#### **ENVIRONMENTAL**

#### **Operating Air Temperature**

**Antenna:**  $-40^{\circ}\text{C}$  to  $80^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$  to

+176°F)

Checktag option: -40°C to +50°C

 $(-40^{\circ}F \text{ to } +122^{\circ}F)$ 

#### Humidity

EN60068-2-30 Variant 1

#### **Vibration Tolerance**

AREMA Part 11.5.1 Class G & H

EN 61373:2010 Category 1B & 2

4 G<sub>RMS</sub> 5 to 500 Hz

#### **Shock Tolerance**

AREMA Part 11.5.1 Class G & H

EN 61373:2010 Category 1B & 2

30 G peak x 18 ms

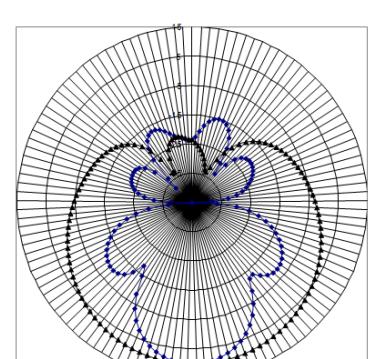
#### **MODEL PART NUMBERS**

#### 12-3233-004

AA3233 On-Board Heavy Rail Antenna with Integrated Check Tag

#### 12-3233-005

AA3233 On-Board Heavy Rail Antenna





#### For more information:

**Sales Support** 800.923.4824

Technical Support 505.856.8007

transcore.com



Antenna Field Pattern

© 1999-2018 TransCore LP. All rights reserved. TRANSCORE is a registered trademark and is used under license. All other trademarks listed are the property of their respective owners. Contents are subject to change.

