# AA3237 Compact HE Antenna

TransCore's AA3237 Compact HE (Harsh Environment) Antenna offers rail integrators a rugged, reliable antenna in a small, easy to install package for today's increasingly crowded train undercarriages.

Designed to meet AREMA and EN shock and vibration standards, the Compact HE Antenna can withstand some of the harshest conditions. The IP65/67 rugged weatherproof enclosure protects the antenna from washdown spray and full submersion.

The Compact HE Antenna can be mounted under the locomotive or on the truck/bogie. Optional spacers allow the antenna to interface with brackets for other readers, minimizing modifications to existing equipment. TransCore's specially designed strain relief mount provides better coaxial cable durability when used in bogie mount applications.

The Compact HE Antenna case materials are designed to meet RoHS, low-toxicity, and low-smoke requirements.



### **Features**

- Constructed to meet AREMA and EN shock and vibration standards
- ▶ IP65/67 rugged weatherproof enclosure
- Corrosion and chemical resistant
- Compact and light-weight
- ▶ RoHS, low-smoke, and low-toxicity compatible
- Includes strain relief for high vibration applications
- ▶ 915MHz ISM band

## **Applications**

- Train positioning
- Rail Automatic Equipment Identification (AEI)



# AA3237 Compact HE Antenna

#### **COMMUNICATIONS**

#### **Frequency Range**

902 to 928MHz

#### Gain (peak)

6 dBi

#### **Polarization**

Linear, parallel with longer side

#### **VSWR**

Maximum: 2.0 Typical: 1.6

#### **Impedance**

50 ohms nominal

#### **Beamwidth**

E-Plane: 84° H-Plane: 87°

#### HARDWARE FEATURES

#### **Connectors**

Antenna: right angle N-type female

#### PHYSICAL CHARACTERISTICS

#### **Dimensions**

**Size:** 7.9 x 12.2 x 2.1 in (20.1 x 31.0 x 5.3 cm)

Weight: 6.1 lbs (2.8 kg)

#### Radome

Impact Rating: 168 inch-pound Gardner

#### **ENVIRONMENTAL**

#### **Operating Air Temperature**

-40°F to + 176°F (-40°C to +80°C)

#### **Humidity**

100% condensing

#### **Vibration Tolerance**

AREMA Part 11.5.1 Class G & H EN 61373:2010 Category 1B & 2

 $3G_{RMS}$  5 to 250Hz

#### **Shock Tolerance**

AREMA Part 11.5.1 Class G & H

EN 61373:2010 Category 1B & 2 30G peak x 18ms

#### **Operational Vibration**

EN 61373:2010 Category 1B & 2

**Maximum**: 20G Random 20-700Hz at 99.99% accuracy

#### **Dust/Water Ingress**

IP65/67

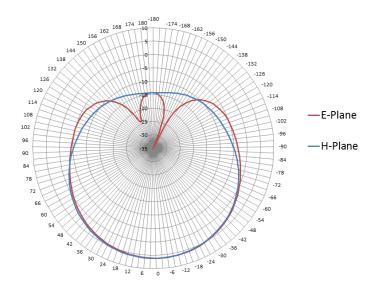
#### **MODEL PART NUMBERS**

#### 12-3237-001

915MHz Compact HE Antenna with spacers

#### 12-3237-002

915MHz Compact HE Antenna without spacers



Antenna Field Pattern

#### For more information:

**Sales Support** 800.923.4824

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transcore.com





