

AA3238

Compact HE Antenna

TransCore's AA3238 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, and ETSI 301 489-1 and -3 requirements for external antennas, the Compact HE Antenna can withstand some of the harshest conditions. The IP65/67 rugged weatherproof enclosure protects the antenna from wash-down 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
- ▶ 870MHz ISM band

Applications

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

AA3238 Compact HE Antenna

COMMUNICATIONS

Frequency Range

865 to 875MHz

Meets EN302 208 Standards

Gain (peak)

7 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

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

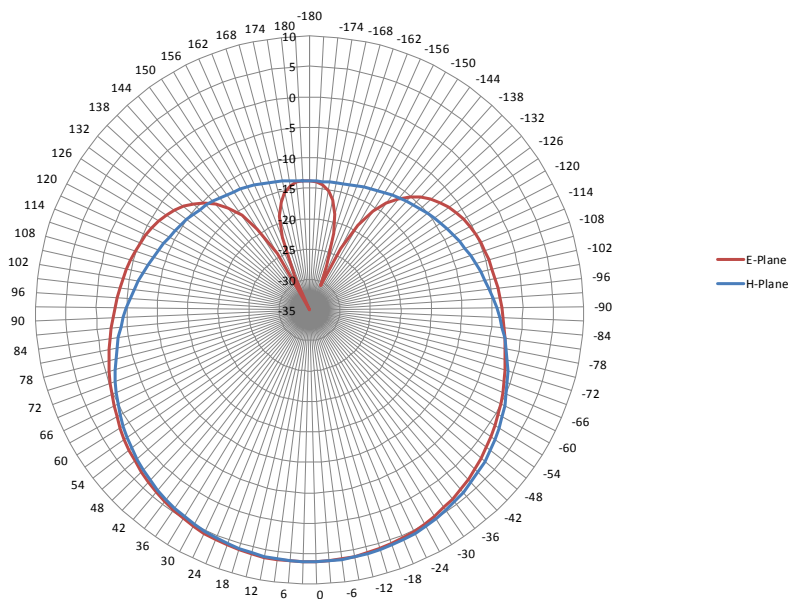
MODEL PART NUMBERS

12-3238-001

870MHZ Compact HE Antenna with spacers

12-3238-002

870MHZ Compact HE Antenna without spacers



Antenna Radiation Pattern

For more information:

Sales Support

800.923.4824

Technical Support

505.856.8007

transcore.com

