



# DUAL BAND UHF\*-GSM/R ANTENNA

440 ÷ 470 and 876 ÷ 960 MHz

BRGD2

POLOMARCONI.IT



POLOMARCONI offers a very wide range of wireless products. Our products can be tailored according to the customer's need.

RAILWAYS AND TRANSPORT

## Electrical Specifications

Frequency Band (MHz)	440 ÷ 470 876 ÷ 960
Impedance (Ω)	50
VSWR	<1.7
Continuous Max. Power (W)	30
Polarization	vertical
Gain (dB) over λ/4 monopole	0 for RST band 3 for GSM/R band
Operation Temp. Range (°C)	-40° ÷ +70°



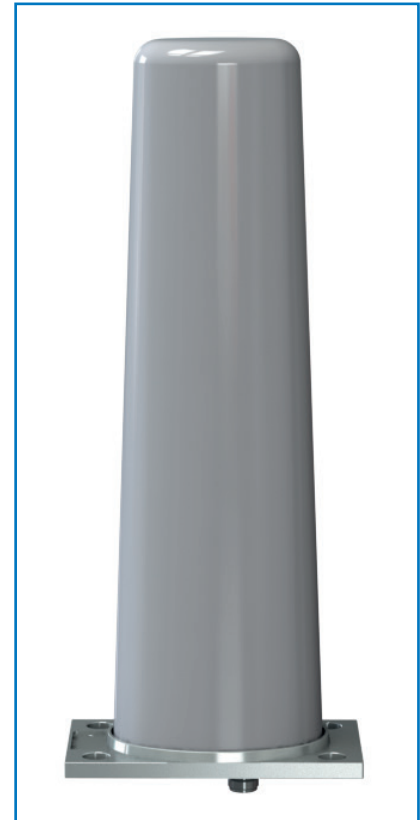
Patent n° 1548873

Antenna for train with protective means against high voltages.

Patent has been used by SNCF and by the most important producers of trains.

## Mechanical Specifications

Connectors	Silver plated brass
Type of connection	N female
Dimensions (mm)	360x80x145
Weight (kg)	0.9
Base material	Aluminium with SURTEC 650 treatment
Radome	High impact polycarbonate
Mounting	on metallic surface (600x600 mm minimum)
Reliability	above to 200,000 hours



## Environmental Characteristics

### ATMOSPHERIC and CLIMATIC CONDITIONS according to NF EN 60068

Temperature conditions	-40°C, +70°C
Atmospheric pressure	-40°C, +70°C, 95% HR at 2000 m
Rain, hail, snow, frost	1000 mm/h, 1 J impact, 0.5 m, 3 cm
Combined wind and train speed	530 km/h

### MECHANICAL CONDITIONS according to NF EN 60068, 61373 and 15-818

Free falls	1 m
Hits (vertical, cross-sectional, longitudinal)	30m/s <sup>2</sup> , 30m/s <sup>2</sup> , 50m/s <sup>2</sup> , 30ms
Impacts	50 J

### GROUNDING and HIGH VOLTAGE PROTECTION according to NF EN 50388 and NF EN 50123

Short-circuit currents flow / time before breaking	70 kA / 5 ms – 40 kA / 100 ms (DC) 31,5 kA / 10 ms – 15 kA / 100 ms (AC)
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## MOUNTING FLANGE

Mounting: on a conductive surface with a minimum size of 600x600 mm; it's advisable to keep the mounting surface clean for a better electrical contact.

BRGD2 4 holes flange: flange with 4 M10 studs included;

**Grounding and high voltage protection:** Our antennas have passed the strict SNCF's tests that approved our products as protected against lightning and high-tension voltage thanks to our patented DC and AC grounded system.

\***Advantage:** UHF frequency could be modified on customer's request

**Approved by:** SNCF, SNCB, TRENITALIA

BY



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