



# MONO BAND VHF RAILWAY ANTENNA

146 ÷ 174 MHz

MFD2-R/F  
146/174

POLOMARCONI.IT

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

TRANSPORT

## Electrical Specifications

### VHF BAND

Frequency band (MHz)	146 ÷ 174
Impedance ( $\Omega$ )	50
VSWR	
146÷174MHz band	$\leq 2.0:1$
158.100÷158.375MHz band	$\leq 1.6:1$
163.100÷163.375MHz band	$\leq 1.6:1$
Continuous Max. Power (W)	30
Polarization	vertical
Gain (dB) over $\lambda/4$ monopole antenna	0

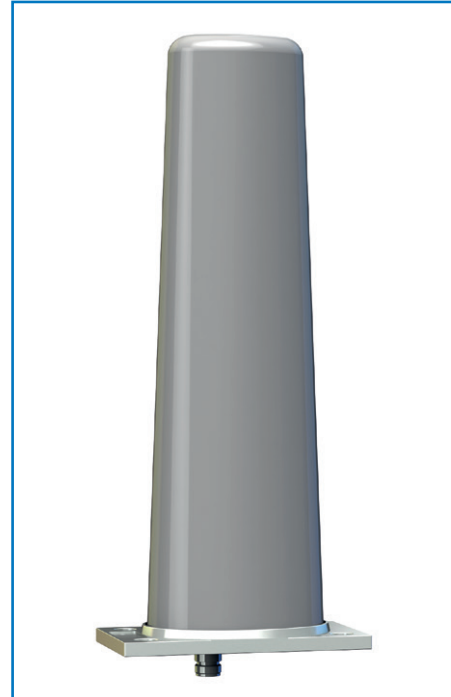
## Mechanical Specifications

Connector	N f
Dimensions(Height from installation surface x Width x Depth, mm)	360x80x145
Weight (kg)	abt. 1.2
Materials	
Base	Aluminium with SURTEC 650 galvanic treatment
Radome	High impact polycarbonate
Mounting	at the center of a metallic conductive surface with a minimum size of 2000x1000mm.



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.





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## Environmental Specifications

### CLIMATIC CONDITIONS according to EN 50155:2017 and EN 60068

Operating Temperature (°C)	-40 ÷ +70
Storage Temperature (°C)	-40 ÷ +70

### MECHANICAL CONDITIONS according to EN 50155:2017 and EN 61373

#### HIGH VOLTAGE PROTECTION according to EN 50124-1

#### HIGH CURRENT PROTECTION according to EN 50153, UIC 758, UIC 533, EN 50388 and EN 50123

Short-circuit currents flow / time before breaking	40 kA / 100 ms (DC)
	15 kA / 100 ms (AC)

#### FLAMMABILITY RATING according to EN 45545-2

IP rating: IP67

RoHS 2011/65/EU compliant

## MOUNTING FLANGE

Mounting: at the center of a metallic conductive surface with a minimum size of 2000x1000mm; it's advisable to keep the mounting surface clean and free from paint for an optimal electrical contact.

Mounting flange holes are indicated in the relevant mounting instructions document.

**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 lines thanks to our patented DC and AC grounded system.

## DRILLING MASK

