



# MONO BAND Wi-Fi ANTENNA

5150 ÷ 5875 MHz

M58D1

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

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## Electrical Specifications

Frequency band (MHz)	5150 ÷ 5875
Impedance ( $\Omega$ )	50
VSWR	< 2.0
Continuous Max. Power (W)	30
Polarization	vertical
Gain (dB)	0 over $\lambda/4$ monopole



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

Connector	1 x Nf						
Dimensions (mm)	70 x 80 x 145						
Weight (kg)	0.5						
Materials	<table border="0"> <tr> <td>base</td> <td>Aluminium with SURTEC 650 treatment</td> </tr> <tr> <td>radome</td> <td>High impact polycarbonate</td> </tr> <tr> <td>connector</td> <td>Silver plated brass</td> </tr> </table>	base	Aluminium with SURTEC 650 treatment	radome	High impact polycarbonate	connector	Silver plated brass
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radome	High impact polycarbonate						
connector	Silver plated brass						
Mounting	on metallic surface (250x250 mm minimum)						
Storage Temp. Range (°C)	-40 ÷ +70						
Operating Temp. Range (°C)	-40 ÷ +70						

## Environmental Specifications

**ATMOSPHERIC and CLIMATIC CONDITIONS according to EN 50155 and EN 60068**

**MECHANICAL CONDITIONS according to EN 50155**

**EMC according to EN 50121-3-2**

**HIGH VOLTAGE PROTECTION according to EN 50153 and EN 50124-1**

**DC GROUNDING, HIGH CURRENT PROTECTION according to EN 50153, UIC 758, UIC 533, EN 50388 and 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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**RoHS 2011/65/EU compliant**

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

<b>IP rating</b>	<b>IP67</b>
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## MOUNTING FLANGE

Mounting: on a conductive surface with a minimum size of 250x250 mm; it's advisable to keep the mounting surface clean for a better electrical contact.

M58D1 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.

**Multiband:** our multiband antennas can operate in several frequency bands simultaneously.  
**Advantage:** amplifier included; there is no need of an external low noise GPS amplifier as the internal GPS antenna is already amplified.

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



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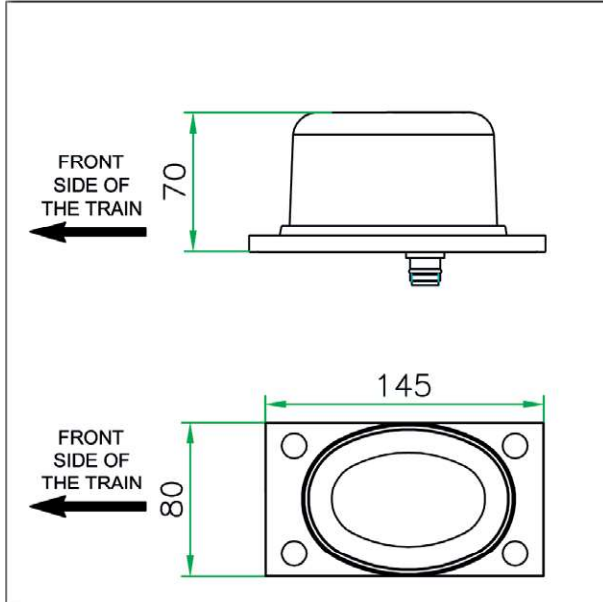
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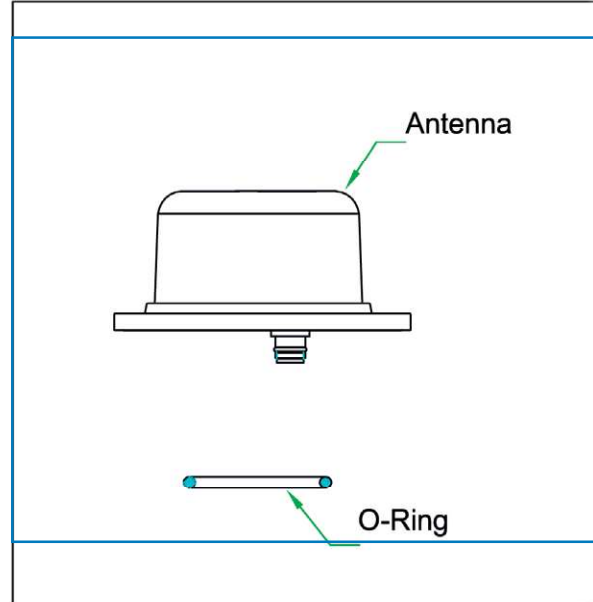
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## GENERAL DIMENSIONS



## EXPLODED VIEW



## MANUAL OF USE

- 1) In order to guarantee the SECURITY OF THE STAFF, in case of fall of the catenary and consequent contact of the same one with the antenna it's necessary that the antenna is mounted on conductive surface (metallic) connected to earth.
- 2) For the use of the antenna on glass-reinforced plastic surfaces or however on non metallic surfaces making sure that the antenna is mounted on a conductive surface (metallic) of recommended dimensions 250x250 mm; IN THIS CASE IS NOT GUARANTEED HOW MUCH BROUGHT BACK TO POINT 1 also maintaining the radioelectric characteristics unchanged.
- 3) For an optimal connection of the antenna with the conductive surface (metallic), before the assembly, strip the zones of contact between surface of antenna's installation and nuts and bolts of implantation.

## PERFORATION MASK

