



WLAN ROOFTOP DIRECTIONAL LOW PROFILE ANTENNA

4900 ÷ 5935 MHz

T01362002

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

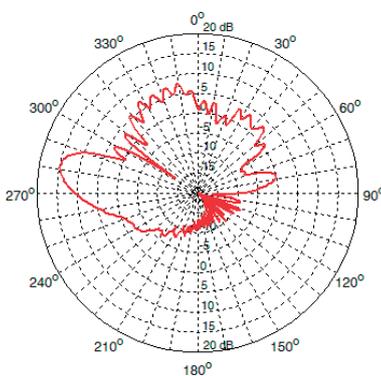
WLAN BAND

Frequency range (MHz)	4900 ÷ 5935	
Impedance (Ω)	50	
VSWR	$\leq 1.8:1$	
Polarization	linear, vertical	
Gain (dBi)	@ 0° of elevation above horizon: ≥ 8 @ 15° of elevation above horizon: in 4900÷5935MHz band ≥ 12 in 5475÷5875MHz band ≥ 12.5	
HPBW (deg)	Horizontal plane	$41^\circ \pm 10^\circ$
	Vertical plane	$16^\circ \pm 4^\circ$
Cross-polarization discrimination (dB) in maximum gain direction	Horizontal plane	≥ 15
	Vertical plane	≥ 15
Front-to-back ration (dB)	Horizontal plane	≥ 10
	in 4900÷5935MHz band	≥ 10
	in 5475÷5875MHz band	≥ 12
	Vertical plane	≥ 12
Maximum rated RF power (W)	50	

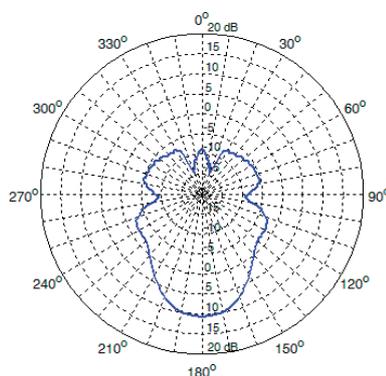


NOTE: The above indicated electrical values are measured with the antenna installed at the center of 1000x1000mm metallic conductive ground plane.

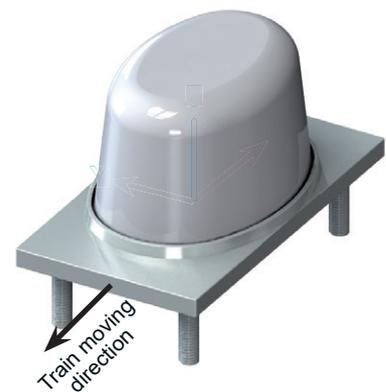
RADIATION PATTERNS



Vertical plane: θ variable, $\varphi = 0^\circ$



Horizontal plane: $\theta = 90^\circ$, φ variable



NOTE: The above indicated radiation patterns are measured with the antenna installed at the center of 1000x1000mm metallic conductive ground plane.



WLAN ROOFTOP DIRECTIONAL LOW PROFILE ANTENNA

4900 ÷ 5935 MHz

T01362002

POLOMARCONI.IT

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

TRANSPORT

Mechanical Specifications

Connector	N female						
Dimensions (Height x Width x Depth, mm)	70 x 80 x 145						
Weight (kg)	abt. 1.0						
Mounting	the antenna need to be installed in longitudinal position with respect to the wind / driving direction						
Ground plane requirement	the above indicated VSWR values are also valid for installations on non-metallic surfaces, but, in order to obtain the above indicated gain and beamwidth values, it is necessary to install the antenna at the center of a metallic conductive ground plane of minimum dimensions 1000x1000mm; it's advisable to keep the mounting surface clean and free from paint for an optimal electrical contact.						
Materials	<table border="0"> <tr> <td>Body</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>	Body	Aluminium with SURTEC 650 treatment	Radome	High impact polycarbonate	Connector	Silver plated brass
Body	Aluminium with SURTEC 650 treatment						
Radome	High impact polycarbonate						
Connector	Silver plated brass						
Operating temperature range (°C)	-40 ÷ +85						

Environmental Specifications

ATMOSPHERIC and CLIMATIC CONDITIONS according to NF EN 60068

Temperature conditions	-40°C, +85°C
Atmospheric pressure	-40°C, +85°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 ² , 30m/s ² , 50m/s ² , 30ms
Impacts	50 J

DC GROUNDING, HIGH VOLTAGE AND HIGH CURRENT PROTECTION according to UIC533

RoHS 2011/65/EU compliant

Flammability rating according to NF F16-101/102, CEN/TS 45545 (2009)

MOUNTING FLANGE

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