



# Wi-Fi AND WiMAX ROOFTOP DIRECTIONAL ANTENNA

4900 ÷ 5935 MHz

T01362001

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## Electrical Specifications

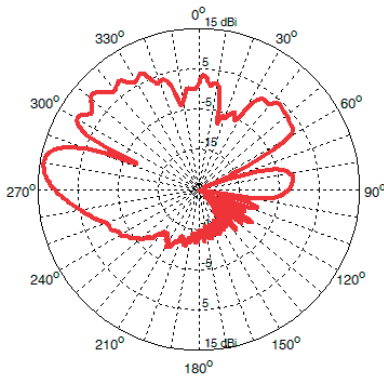
### Wi-Fi and WiMAX BANDS

Frequency range (MHz):	4900 ÷ 5935
Input impedance ( $\Omega$ ):	50
VSWR:	$\leq 1.5:1$
Polarization:	linear, vertical
Gain (dBi):	
@ 0° of elevation above horizon:	$\geq 8$
@ 15° of elevation above horizon:	$\geq 12$
HPBW (deg):	
Horizontal plane:	32°
Vertical plane:	17°
Maximum rated RF composite power (W):	100

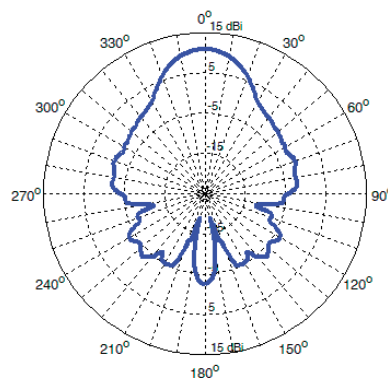


**NOTE:** The above indicated electrical values are measured with the antenna installed at the center of 1000x1000mm metallic conductive ground plane.

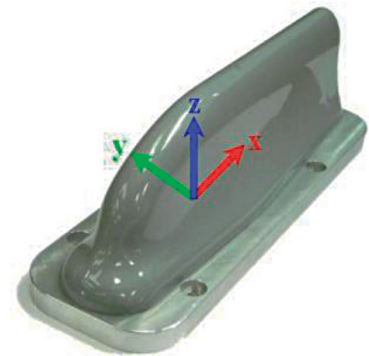
## RADIATION PATTERNS



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



Horizontal plane:  $\vartheta = -90^\circ$ ,  $\varphi$  variable



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## Mechanical Specifications

Dimensions (Height x Width x Depth, mm):	100 x 100 x 315
Weight (kg):	abt. 1.7
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 for a better electrical contact.
Body material:	Aluminium with SURTEC 650 treatment
Radome material:	High impact polycarbonate
Connector:	Silver plated brass
Type of connection:	N female
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):	30 m/s <sup>2</sup> , 30 m/s <sup>2</sup> , 50 m/s <sup>2</sup> , 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.

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