

PS-5800-37-18-DP



ANTENNA

PARABOLIC SHIELDED ANTENNA

- Dual slant link $\pm 45^\circ$
- Excellent Shielding
- State-of-the-art computational tool design



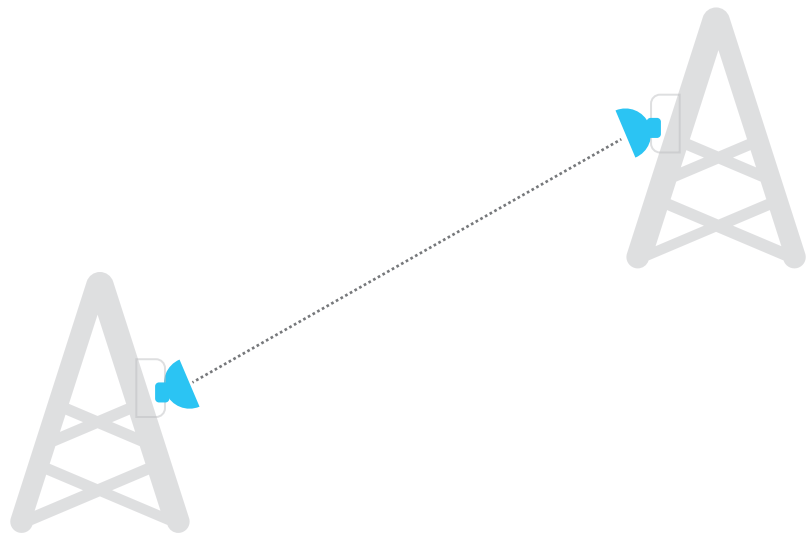
Technology for professional links

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APPLICATION

ALGcom Parabolic Shielded Antennas were designed with high technology to ensure the best performance in unlicensed frequency wireless links. They are used on point-to-point wireless links and have standard fitting for coupling the ALGcom Armored Boxes, in addition to having a support that allows for the easy link alignment.

Get to know Parabolic Shielded Antennas ALGcom!

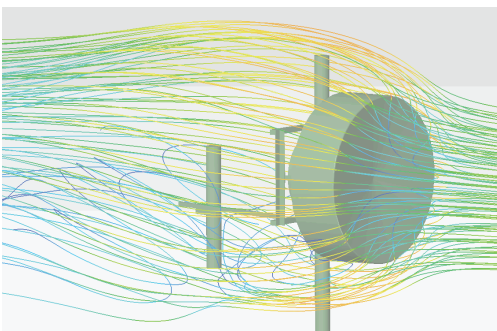


DUAL SLANT LINKS $\pm 45^\circ$

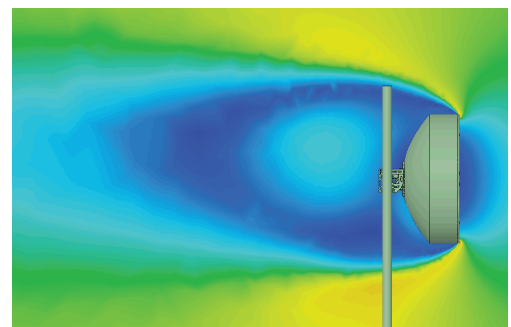
Better flexibility in double-polarized links with possibility of installation V / H or $\pm 45^\circ$

STATE-OF-THE-ART COMPUTATIONAL TOOL DESIGN

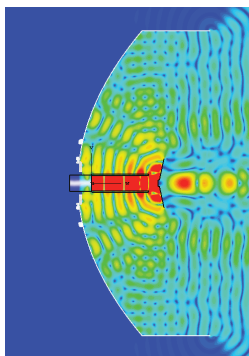
ALGcom Parabolic Shielded Antennas are designed using electromagnetic simulation and structural calculation softwares, providing the best structural performance, reducing the weight and improving the product life span. In all ALGcom products are used sophisticated calculation methods and state of the art tools. There are many possibilities of simulation, based on rules and regulations. The results were approved by our engineers and the mechanical stability proof is based on Anatel's 932 ACT and 953 ACT (resolutions 609 and 610). The values identified as wind forces resulting from several fluid dynamics simulations by numerical analysis' software and aerodynamic property calculations. The patterns determine resistance and wind forces coefficients that act on the antenna, leading a load to the mounting pipe. This load can be divided in an axial force, a lateral force and a torsion moment. Aspects like the shape of antenna, radome, and reflectors are taken into account too.



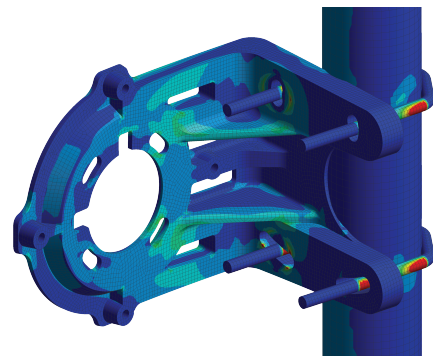
Computation Fluids Dynamics Analysis



Computation Fluids Dynamics Analysis



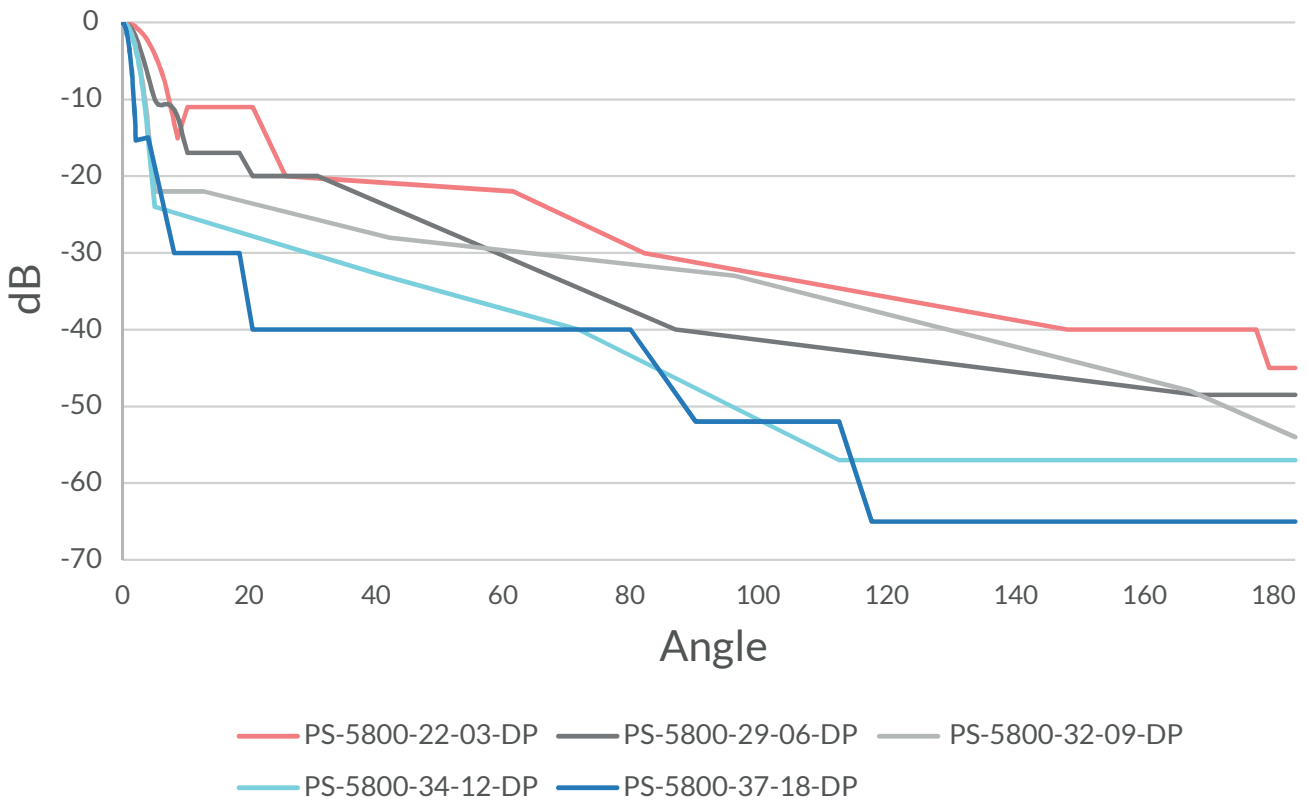
Transient Finite Integration Technique



Structural Finite Elements Analysis

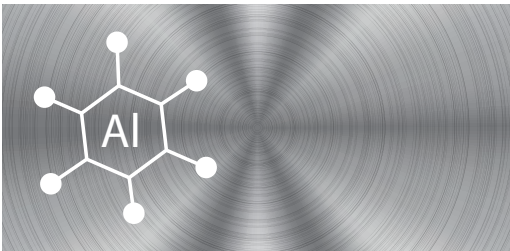
EXCELLENT SHIELDING

ALGcom Parabolic Shielded Antennas have excellent noise immunity thanks to their side shielding. Check below the irradiation diagrams of each of the models.



PARABOLIC SHIELDED ANTENNA

5,25 - 5,875 GHz

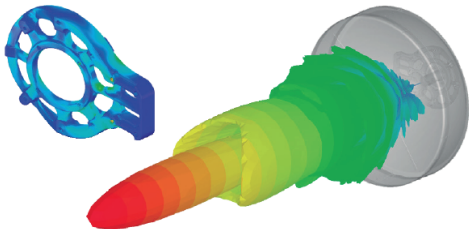


100% Aluminum Structure.



*VSWR and isolation 100% verified. Technical report is included.

*VSWR- Voltage Standing Wave Ratio



Projects are designed with computational tools that allows ALGcom to optimize the radiation efficiency and evaluate the mechanical structure.



Complete range of accessories to suit all applications and ensure the best link performance.



All models approved by Anatel and 3 years warranty.

MODELS

ELECTRICAL SPECIFICATIONS

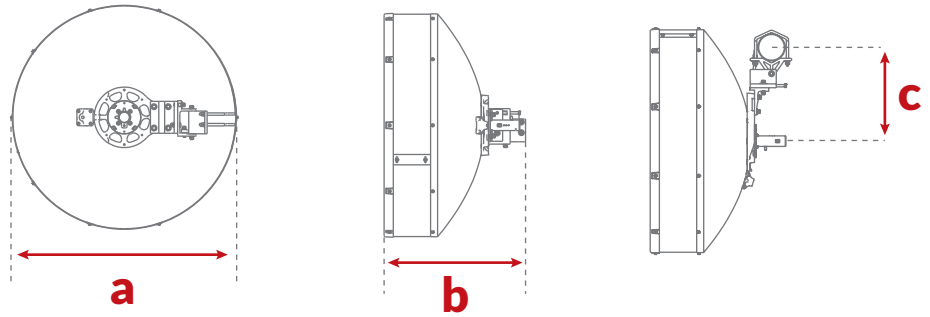
	PS-5800-37-18-DP
Frequency range	5,25 - 5,875 GHz
Diameter	1,8 m
Gain High Band	38,2 dBi
Mid band	37,8 dBi
Low band	37,3 dBi
Beamwidth	1,9°
Front-to-back ratio (180° +/-80°)	> 61 dB
Polarization	Double (V and H) or Slant (+/- 45°)
XPD	> 30 dB
Isolation between ports	> 30 dB
VSWR	< 1,5:1
Antenna input	SMA Female reverse

MECHANICAL SPECIFICATIONS

	PS-5800-37-18-DP
Azimuth adjustment	+/- 10°
Elevation adjustment	+/- 7,5°
Polarization adjustment	+/- 5°
Approximate weight	70,2 kg
Mounting pipe diameter	Ø4.1/2"
Operational windspeed	110 km/h
Survival windspeed	200 km/h

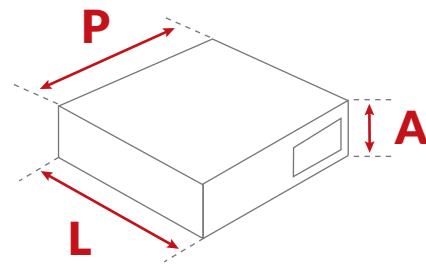
DIMENSIONS

	1.8 m
a	1912 mm
b	1175 mm
c	328 mm



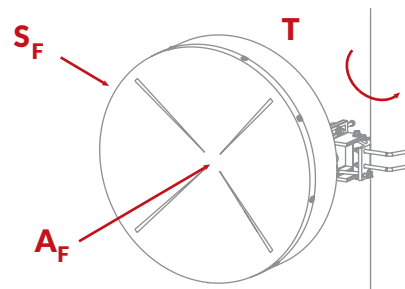
PACKING

	1,8 m
Material	Wood
Height (A)	2150 mm
Width (L)	2050 mm
Depth (P)	700 mm
Volume	3.085 m ³
Packed weight	142 kg



INCIDENT FORCES ON SURVIVAL WIND

	PS-5800-37-18-DP
Torque (T)	1871 Nm
Axial force (A _F)	6590 N
Side force (S _F)	3462 N





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