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LAUNCHERS ANTENNAS

COMPACT ANTENNAS PORTFOLIO

FOR SATELLITES

- > PATCH ANTENNA
- > DATA DOWN LINK ANTENNA

THERMAL PROTECTED ANTENNAS

- > RE-ENTRY ANTENNAS

SERVICES

- > RF & EMC MEASUREMENTS

> **LAUNCHERS ANTENNAS**

LAUNCHERS ANTENNAS

PATCH TECHNOLOGY

ArianeGroup has a strong heritage and expertise in communication links onboard launchers such as Ariane, Soyouz and Vega for GNSS, Trajectory, Telecommand and Telemetry.



	L1 GPS	L1 + E5 GNSS	A6 TJ	A6 TC	A6 TM
ELECTRICAL SPECIFICATIONS					
Band Designation	L	L	C	UHF	S
Frequency Band	1575,42 ± 30 MHz	1176,45 ± 20 MHz 1575,42 ± 30 MHz	On Demand	On Demand	2200 to 2290 MHz
Radiation Pattern	Hemispherical	Hemispherical	Hemispherical	Hemispherical	Hemispherical
Polarization	Circular	Circular	Circular	Circular	Circular
VSWR	<1.5:1 (-14 dB)	<2:1 (-14 dB)	<1.7:1 (-12 dB)	<2.5 (-9.5 dB)	<1.5:1 (-14 dB)
I/O Impedances	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Gain	Maximum gain : 6 dBi	Maximum gain : 6 dBi	Maximum gain : 5 dBi	Maximum gain : 5 dBi	Maximum gain : 5 dBi
MECHANICAL SPECIFICATIONS					
Size (Diameter)	< 90 mm	130 x 130 mm	120 x 120 mm	250 x 150 mm	250 x 250 mm
Height	<10 mm	<13 mm	< 10 mm	< 10 mm	< 10 mm
Weight (including thermal Protection)	< 120 g	< 500 g	< 300 g	< 1000 g	< 1000 g
Technology	Microstrip Patch	Microstrip Patch	Microstrip Patch	Microstrip Patch	Microstrip Patch
Connector	Female SMA	Female SMA	Female SMA	Female SMA	Female SMA
ENVIRONMENTAL CONDITIONS					
Operating temperature *	-30°C / +180°C	-40°C / +135°C	-30°C / +180°C	-30°C / +180°C	-30°C / +180°C
Vacuum	10 ⁻⁵ mbar	10 ⁻⁵ mbar	10 ⁻⁵ mbar	10 ⁻⁵ mbar	10 ⁻⁵ mbar
Vibrations	Sinus : 22,5 g Random : 49 g RMS	Random : 49 g RMS	Sinus : 22,5 g Random : 49 g RMS	Sinus : 22,5 g Random : 49 g RMS	Sinus : 22,5 g Random : 49 g RMS
Shocks	Pyrotechnical : 30 000 g	-	Pyrotechnical : 30 000 g	Pyrotechnical : 30 000 g	Pyrotechnical : 30 000 g
<p>> Mounting Configuration: Low-profile, can be conformal depending on the radius of the vehicle, can be flush mounted</p> <p>> All these performances are for reference at ambient temperature.</p> <p>* (under thermal Protection)</p>					

> Thermal Protection : ArianeGroup Norcoat® 4000

- > The coverage rate of antenna systems on a launcher can be calculated on demand.
 - > Manufactured and/or distributed under ISO 9001, EN 9100, and ISO 14001
 - > Designed to be compliant with Aerothermal fluxes in launchers flight conditions

CONTACT

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