

SPACE DYNAMICS

satellite technologies and beyond



Aluminium panels with high-diffusive white paint

From 1.5 to 18.0 GHz



ITU RS.524-5



Survival 200 km/h



Azimuth ± 180



13M ANTENNA SYSTEM

KU OR C BAND

CASSEGRAIN ANTENNA

WITH ELEVATION OVER AZIMUTH MOTORIZATION

13M ANTENNA SYSTEM

DUAL SHAPED C OR KU BAND

KU BAND

	RX Band	TX Band
Frequency in GHz	10.70 – 12.75	13.75 – 14.50
Polarization (four port feed)	Linear	Linear
Gain (linear pol.)	62.20 dBi @ 11.725 GHz	63.81 dBi @ 14.125 GHz
Off axis emissions	ITU RS.524-5	ITU RS.524-5

ANTENNA NOISE TEMPERATURE

10° Elevation	55.29k	
20° Elevation	45.11K	
40° Elevation	40.06K	
System G/T (70 K LNA plate, 20° Elev.) @ mid band	40.60 dB/K	
Cross polarization within 1 dB Beam width	< 35 dB	< 35 dB
VSWR	<1.25:1	<1.25:1
Feed Insertion Loss	-0,5	-0,35
Total Power Handling		5 KW
TX – RX Isolation	> 70 dB	> 85 dB
Feed interface	WR-75	WR-75

MECHANICAL SPECIFICATIONS

Azimuth Travel	± 180°
Azimuth Travel rate	0.2 °/sec
Elevation Travel	0° to 90° Continuous
Elevation Travel Rate	0.2 °/sec
Polarization Travel	± 90°
Polarization Travel Rate	1 °/sec
Tracking Travel Rate (Az. And El.)	0.02 °/sec
Reflector Structure	Aluminium
Pedestal Structure	Steel
Finishes	Aluminium panels with high-diffusive white paint, Steel part with Hot-deep galvanized

C BAND

	RX Band	TX Band
Frequency in GHz	3.4 - 4.2	5.85 - 6.650 (option 5.85 - 6.725)
Polarization (four port feed)	Linear or circular (option Circular/Linear)	Linear or circular (option Circular/Linear)
Gain (linear pol.)	52.73 dBi @ 3.8 GHz	57.03 dBi @ 6.25 GHz
Off axis emissions	ITU RS.524-5	ITU RS.524-5

ANTENNA NOISE TEMPERATURE

10° Elevation	48.58k	
20° Elevation	41.59k	
40° Elevation	38.16k	
System G/T (35 K LNA plate, 20° Elev.) @ mid band	33.05 dB/K	
Cross polarization within 1 dB Beam width	< -35 dB linear < -30 dB circular	< -35 dB linear < -30 dB circular
VSWR	<1.25:1 linear & circular	<1.25:1 linear & circular
Feed Insertion Loss	-0,5 Linear -06 dB circular	-0,5 Linear -06 dB circular
Total Power Handling		6 KW
TX – RX Isolation	> 85 dB	> 85 dB
Feed interface	CPR-229G	CPR-137G

ENVIRONMENTAL SPECIFICATIONS

Operational winds	72 km/h gusts to 97 km/h
Survival Wind	200 km/h
Ambient Temperature Operational	- 30° to +55°
Ambient Temperature Survival	- 40° to +60°
Rain	up to 10 cm/h
Snow	5 mm/h
Relative Humidity	up to 100% with condensation
Solar Radiation	1.2 kW/m2
Radial Ice (Survival)	25mm/h on all surface
Shock and Vibration	As encountered during shipment by commercial air, rail or truck
Corrosive Atmosphere	As encountered in coastal regions and/or heavily industrialized areas
Seismic (Survival)	0.3G's horizontal 1G's vertical

ALSO AVAILABLE L,S,X AND DBS BAND FEED CONFIGURATIONS



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Note: all specifications are subject to change without notice.
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