SPACE DYNAMICS
satellite technologies and beyond

ALU
Aluminium panels with high-diffusive white paint

From 1.5 to 18.0 GHz
ITU RS.524-5

Survival 200 km/h

Azimuth ± 180

GUARANTEED 2 YEARS GUARANTEED

5M ANTENNA SYSTEM

KU OR C BAND / FOR EARTH STATION

CASSEGRAIN ANTENNA
WITH ELEVATION OVER AZIMUTH MOTORIZATION

5M 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 orthogonal	Linear orthogonal
Gain (linear pol.)	53.8 dBi @ 11.70 GHz	55.5 dBi @ 13.83 GHz
Off axis emissions	ITU RS.524-5	ITU RS.524-5
ANTENNA NOISE TEMPERATURE		
10° Elevation	67k	
20° Elevation	58k	
40° Elevation	53K	
System G/T 60 K LNA plate, 20° Elev.) @ mid band	32.8 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	>0,5
Total Power Handling		5 KW
TX – RX Isolation	> 70 dB	> 95 dB
Feed interface	WR-75	WR-62

C BAND

	RX Band	TX Band
Frequency in GHz	3.4 - 4.2	5.85 - 6.665
Polarization (four port feed)	Linear or circular	Linear or circular
Gain (linear pol.)	44.40 dBi @ 3.8 GHz	48.30 dBi @ 6.25 GHz
Off axis emissions	ITU RS.524-5	ITU RS.524-5
ANTENNA NOISE TEMPERATURE		
10° Elevation	44k	
20° Elevation	39k	
40° Elevation	37k	
System G/T (20 K LNA plate, 30° Elev.) @ mid band	26.00 dB/K	
Cross polarization within 1 dB Beam width	< 29 dB circular < 35 dB linear	< 29 dB circular < 35 dB linear
VSWR	<1.25:1 linear & circular	<1.25:1 linear & circular
Feed Insertion Loss	Less then 0.5 dB	Less then 0.5 dB
Total Power Handling		6 KW
TX – RX Isolation	> 85 dB	> 85 dB
Feed interface	CPR-229G	CPR-137G

MECHANICAL SPECIFICATIONS

Azimuth Travel	± 180°
Azimuth Travel rate	0.01 to 0.2 °/sec (Digital continuosly controlled)
Elevation Travel	0° to 90° Continuous
Elevation Travel Rate	0.01 to 0.2 °/sec (Digital continuosly controlled)
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

ENVIRONMENTAL SPECIFICATIONS

Operational winds	72 km/h gusts to 97 km/h
Survival Wind	200 km/h
Ambient Temperature Operational	-20° to +50°
Ambient Temperature Survival	- 40° to +60°
Rain	Operational and survival in heavy rainstorms
Snow	5 mm/h
Relative Humidity	0% to 100% with condensation
Solar Radiation	1000 W/mq
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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