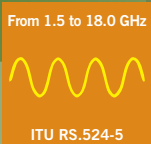


SPACE DYNAMICS

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



3.7M ANTENNA SYSTEM

KU BAND / FOR EARTH STATION

RING FOCUS

WITH ELEVATION OVER AZIMUTH MOTORIZATION

3.7M ANTENNA SYSTEM

DUAL SHAPED KU BAND

The RX/TX antenna provides high gain and exceptional pattern characteristics.

High electrical performance and exceptional versatility constitute the ability to configure the antenna with your choice of linearly or circularly polarised 2-port or 4-port combining network.

The 3.7m antenna is a rugged, reliable antenna system that operates at Ku Band frequencies with high efficiency and at the same time successfully withstands environmental effects. The antenna consists of main reflector, subreflector, mount assembly, back struts and feed assembly.

The aluminium alloy reflector is precision formed for accuracy and strength, which requires minimal maintenance. The reflector assembly is 3.7m in diameter and segmented into a twelve piece configuration to reduce shipping volume and to facilitate transport to remote sites.

The reflector panels are conversion coated and painted with a highly reflective white paint. Hot-dipped galvanized steel mount maintains pointing accuracy and ensures durability and reliability.

The mount can be purchased with either manual or motorizable capabilities.

The surface of the subreflector and feed system is hot-dipped galvanized.

The feed is made up of a conic corrugated horn and a circular transition with flange to connect the feed system (supplied with 2 or 4 ports on request).

KU BAND

	RX Band	TX Band
Frequency in GHz	10.95 – 12.75	13.75 – 14.50
Polarization (four port feed)	Linear orthogonal	Linear orthogonal
Gain (linear pol.)	51.6 dBi @ 11.70 GHz	53.2 dBi @ 14.10 GHz
Off axis emissions	ITU RS.580-65	ITU RS.580-6
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	
Polarization isolation @ -1 dB contour	> 35 dB	>35 dB
VSWR	<1.20:1	<1.20:1
Feed Insertion Loss	>0,5	>0,5
Total Power Handling		5 KW
TX – RX Isolation	> 120 dB	> 90 dB
Feed interface	WR-75	WR-62

MECHANICAL SPECIFICATIONS

Azimuth Travel	± 65 Deg. (Fine) 0-360 Deg. (Option-manual)
Azimuth Travel rate	0.01 to 0.2 °/sec (Digital continuously controlled)
Elevation Travel	0° to 90° Continuous
Elevation Travel Rate	0.01 to 0.2 °/sec (Digital continuously 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	120 km/h
Survival Wind	210 km/h
Ambient Temperature Operational	-30° to +60°
Ambient Temperature Survival	- 40° to +70°
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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