

7.3 mt Antenna for Earth Station

Antenna has a cassegrain optics type, specially formed in order to get maximum efficiency, reliability and structure stability of antenna system.

Aluminium precision formed panels are used in order to maintain light weight for the entire structure while guaranteeing high reliability of RF performances.

Special manufacturing process for antenna panels is able to guarantee low RMS surface value, that is mandatory for mission critical applications.

Support structure for the main reflector panels is machined in such way that no panels distortion is introduced. This structure make use of machined formed metal ribs.

Subreflector is precision machined in order to get exact shape needed to guarantee optimum illumination efficiency of main reflector, while maintaing minimum surface loss.

Antenna hub is provided with enough space to host entire feed system as well as critical customer equipment (LNAs plate, etc.). Special design for the antenna hub can also be provided upon request according specific customer requirements.

De-icing sub-system (OPTIONAL), including heating system for main reflector, sub-reflector and feed as well as an indoor de-icing control system equipment.

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Model Type: **ANP0082A**



ISO 9001:2015

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Antenna	7.3 mt Ku band Antenna		
	Rx		Tx
Antenna Diameter	7.3 mt		
Antenna Type	Cassegrain		
Surface Accuracy RMS (mm)	≤ 0.5 Main-reflector ≤ 0.3 Sub-reflector		
Frequency (GHz)	10.70 – 12.75	13.75 – 14.50	
Gain (dBi) @ mid band	57	58.4	
Feed	4 Ports (2 Rx and 2 Tx)		
VSWR	≤ 1.3:1		
G/T @ 20° El	Better than 34 dB/K		
Power Handling Capability		2 KW per port	
Feed interface	WR-75	WR-75	
Feed Insertion Loss (dB)	≤ 0.5	≤ 0.5	
Cross Pol Isolation @ 1 dB contour (dB)	35	35	
Isolation (dB)	Tx/Tx or Rx/Rx ≥ 30 Tx/Rx ≥ 85		
Radiation Pattern	ITU 580-6		
Mechanical			
Mount Type	Elevation over Azimuth		
Antenna Travel Range (Continuous)	Azimuth: 120° continuous	Elevation: 0° to 90°	Polarization: ±90°
Drive Mode	Motorized		
Azimuth Travel Speed	0.02°/s min. – 0.5°/s max.		
Elevation Travel Speed	0.02°/s min. – 0.5°/s max.		
Polariz. Travel Speed	0.5°/s max.		
Environmental			
Wind Speed	75 km/h operational, 100 km/h gusting 200 km/h survival (stow position)		
Ambient Temperature	-40° C to +60° C		
Relative humidity	0 to 100% with condensation		
Rain fall	100 mm/hour continuous		
Solar Radiation	1135 Kcal/h/mq		
Atmospheric Condition	Salt, pollutants, and corrosive contaminants as conditions found in coastal and industrial area		

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