



## 9.3 MT ANTENNA FOR EARTH STATION

Model Type: **ANP0027A**

**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, including heating system for main reflector, sub-reflector and feed as well as de-icing control system equipment.



**ISO 9001:2015**



## ANTENNA SPECIFICATION

Type	93 mt Ku band Antenna	
	Rx	Tx
Antenna Diameter	9.3 mt	
Antenna Type	Cassegrain	
Frequency (GHz)	10.70 – 12.75	13.75 – 14.50
Gain (dBi) @ Mid Band	58.90	60.90
Feed	4 Ports (2 Rx and 2 Tx)	
VSWR	≤ 1.3:1	
G/T @ 20° El. - 11.35 GHz	Better than 37 dB/K	
Feed Interface	WR-75	WR-75
Feed Insertion Loss	≤ 0.6 dB	≤ 0.5 dB
Power Handling Capability	2 KW per port	
Cross Pol Isolation @ 1 dB contour	35 dB	35 dB
Isolation (dB)	Tx/Tx or Rx/Rx ≥ 30Tx/Rx ≥ 85	
Radiation Pattern	ITU 580-6	
Surface Accuracy RMS (mm)	≤ 0.5 Main-reflector ≤ 0.3 Sub-reflector	

## MECHANICAL SPECIFICATION

Mount Type	Elevation over Azimuth		
Antenna Pointing Range (Continous)	Azimuth	Elevation	Polarization
	±180°	0° to 90°	± 90°
Drive Mode	Motorized		
Azimuth Travel Speed	0.02°/s min. – 0.2°/s max.		
Elevation Travel Speed	0.02°/s min. – 0.2°/s max.		
Polarization Travel Speed	0.02°/s min. – 0.2°/s max.		

## ENVIRONMENTAL SPECIFICATION

Wind Speed	72km/h operational 100 km/h gusting 180 km/h survival
Ambient Temperature	-20 to +55°
Relative humidity	0 to 100% with condensation
Rain fall	100 mm/hour continuos
Solar Radiation	1135 Kcal/h/mq
Atmopheric Condition	Salt, pollutants, and corrosive contaminants as conditions found in coastal and industrial area

ITALSPAZIO

Viale Vittorio Emanuele Orlando, 7 - 95037 San Giovanni La Punta (CT)

+39 095 7511521 - italspazio.com