



Alignsat 1.2m Earth Station Antenna

Alignsat 1.2m antenna delivers exceptional high performance for transmit/receive application in C ,Ku, ka, X band in Tx/Rx 2 port or Rx 2 port with high gain, low noise and low microwave interference.

The electrical performance is compliant with FCC and ITU-RS-580 sidelobe specifications and Intelsat, Eutelsat, INMARSAT, ASIASAT, APT and CHINASAT, etc. requirement.



PERFORMANCE STRENGTH

- High quality aluminum reflector panels and galvanized steel backup structure.
- C, Ku, Ka, X band available, meeting FCC and ITU-RS-580 requirements.
- Galvanized steel elevation over azimuth pedestal.
- Fixed foundation and Non penetrating foundation optional for wider choice.
- Survives 125 mph winds in any position.

ELECTRICAL SPECIFICATION (1/2)

		AT12K	
		Ku-Band	
Operating Frequency, GHz		Receive 10.95 - 12.75	Transmit 13.75 - 14.5
Gain, Mid-band, dBi		41.6	43.1
Polarization		Linear	
XPD (on Axis), dB		35	35
XPD across 1dB Beam Width, dB		33	33
VSWR		1.25	1.25
Antenna Noise Temperature 1-port feed			
10° Elevation		47°K	
20° Elevation		46°K	
30° Elevation		43°K	
-3 dB Beam Width, Mid-band		1.48°	1.24°
Tx. Power Capability, KW			2
Feed Interface		WR-75	WR-75
Feed Insertion Loss, dB		0.25	0.2
Isolation, Tx to Rx, dB			85
First Side lobe			-14
90% Peaks under Following Envelop			29-25log (1° ≤ 0 < 20°)





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MECHANICAL SPECIFICATION

Antenna Diameter	1.2m
Antenna Type	Offset antenna
Surface Accuracy (RMS)	≤0.35mm
Antenna Pointing Range	
Azimuth	0°-360° 310° (Continuous)
Elevation	0°-90°(Continuous)
Polarization	±360°(Continuous)
Drive Mode	Manual or Motorized
Motor Drive System	
Azimuth Travel Rate	0.30°/S(0.06°/S)
Elevation Travel Rate	0.20°/S(0.04°/S)
Antenna Reflector Material	Aluminum Alloy
Finish of steel parts	Hot dipped Zinc

ENVIRONMENTAL SPECIFICATION

Operational Wind	72km/h gusting to 97km/h
Survival Wind	216km/h
Temperature	-40°-+60°
Relative Humidity	100%
Solar Radiation	1135Kcal/h/m ²
Seismic (Survival)	0.3g(H), 0.15g(V)
Ice Loading	13mm Operational; 25mm Survival

