



Alignsat 3.0m Earth Station Antenna

Alignsat 3m 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. Alignsat 3m antenna offers a fine reflector design with a stretch formed double contoured panels, strong back struts and hub for ease of field alignment.

The standard designed azimuth over elevation pedestal provides a cost-effective solution for ground or roof installation with high stiffness and stability, full orbital arc coverage and fine drive performance, and ensures the pointing and tracking accuracy.

The electrical performance is compliant with FCC and ITU-RS-580 side lobe 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)

	AT30C		AT30K	
	C-Band		Ku-Band	
Operating Frequency, GHz	Receive 3.625-4.2	Transmit 5.85-6.425	Receive 10.95-12.75	Transmit 13.75-14.5
Gain, Mid-band, dBi	40.1	43.7	49.6	50.8
Polarization	Linear / Circular		Linear	
XPD (on Axis), dB	35		35	
XPD across 1dB Beam Width, dB	33		33	
Axial Ratio/2-Port Feed (Circular-Polarized)	1.3	1.09		
VSWR	1.25		1.25	
Antenna Noise Temperature 2-port feed				
10° Elevation	29°K		48°K	
20° Elevation	22°K		39°K	
30° Elevation	19°K		35°K	
G/T (EI 10°)	20.4dB/°K (30°LNA)		27dB/°K (70°LNA)	





Alignsat 3.0m Earth Station Antenna

ELECTRICAL SPECIFICATION (2/2)

	AT30C		AT30K	
-3dB Beam Width, Mid-band	1.5°	1.1°	0.56°	0.49°
Tx. Power Capability, KW	5		2	
Feed Interface	CPR-229G	CPR-137G	WR-75	WR-75
Feed Insertion Loss, dB	0.2	0.2	0.25	0.2
Isolation, Tx to Rx, dB	90		85	
First Side lobe 90% Peaks under Following Envelop	-14 29-25log (1°≤0<20°)		-14 29-25log (1°≤0<20°)	

MECHANICAL SPECIFICATION

Antenna Diameter	3.0m
Antenna Type	Ring Focus
Surface Accuracy (RMS)	≤0.35mm
Antenna Pointing Range	
Azimuth	0°-360°
Elevation	0°-90°(Continuous)
Polarization	±360°(Continuous)
Drive Mode	Manual or Motorized
Motor Drive System	
Azimuth Travel Rate	0.11°/S(0.03°/S)
Elevation Travel Rate	0.16°/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

