



# Alignsat 3.7M Receive Only Antenna

Alignsat 3.7m prime focus antenna can deliver superior performance for sat communication applications such as Broadcasters, Service Providers, GSM operator, Satellite operator, Military and Government Agencies, FreeLands or Rescue Organizations.

Alignsat 3.7m prime focus antenna adopts all aluminum re-enforced reflectors, consisting of precisely formed panels with matched radials and hub assemblies ensure the ease of installation.

The standard designed azimuth over elevation pedestal provides a cost-effective solution for high stiffness and stability, full orbital arc coverage and fine drive performance, and ensures the pointing accuracy for C-Band Rx and Ku-Band Rx operations.



## PERFORMANCE STRENGTH

- High gain, low side lobe, high cross-polarization isolation.
- C/Ku band optional, linear/circular polarization optional.
- Meets CCIR 580 and INTELSAT Requirements

## ELECTRICAL SPECIFICATION

3.7m Rx only antenna		
	C-Band Receive 3.4-4.2	Ku-Band Receive 10.95-12.75
Operating Frequency, GHz		
Typical Gain dBi	41.81 at F=3.8GHz	51.83 at F=12.5GHz
Cross Pol Isolation On Axis	≥30dB	≥30dB
VSWR	1.3:1	1.3:1
Noise Temperature (°K) (1/2 ports feed)		
10° Elevation	35K	41K
20° Elevation	30K	36K
40° Elevation	26K	32K
Axial Ratio	0.75dB	1dB
Beam Width	1.334°	0.421°
Typical G/T at 10° EL	24.03 dB/K 3.8GHz, 30K LNA	31.58 dB/K 12.5GHz, 70K
Feed Insertion Loss, dB	0.2	0.25
Feed Interface	CPR-220	WR-75
Side lobe	CCIR. 580-5	





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## MECHANICAL SPECIFICATION

Antenna Diameter	3.7m
Antenna Type	Prime focus antenna
Reflector thickness	1.3mm
Reflector material	Aluminium and powder painting
Other parts	Hot-Dip Galvanized
Package	Wooden case
Antenna pedestal	EL/AZ
Foundation type	Concrete foundation & Non penetrating foundation optional
Drive mode	Manual or motorized
Antenna Surface Accuracy (RMS)	≤0.5mm
Antenna Pointing Range	
Azimuth	±42° Continuous
Elevation	0°-90° Continuous
Polarization	±360° Continuous

## ENVIRONMENTAL SPECIFICATION

Operational Wind	79km/h gusting to 126km/h
Survival Wind	198km/h
Temperature	-40°-+60°
Relative Humidity	100%
Solar Radiation	1000Kcal/h/m <sup>2</sup>
Seismic (Survival)	0.3g(H), 0.15g(V)
Ice Loading	13mm Operational; 30mm Survival

