



Alignsat 1.8m Rx Only Antenna

FEATURES

- Feed forward antenna, single pole stand, drive mode: manual.
- High gain, low side lobe, high cross-polarization isolation.
- C/Ku band optional, linear/circular polarization optional.

MANUFACTURING TECHNIQUE

- Reflector panels: shaping, degreasing, painting.
- Steel parts: rust removing, sand blasting and zinc spraying, painting

ELECTRICAL SPECIFICATIONS

Item	Ku-Receive
Frequency (Ghz)	10.95-12.75
Gain (dB)	$\geq 45.59 + 20\lg(f/12.5)$
VSWR	$\leq 1.30:1$
Beam width (-3dB)	$\leq 0.89^\circ$
Noise Temperature	≤ 55
Feed Interface	WR-75
Cross Polarization Isolation	$\geq 27\text{dB}$
Axial Ratio	≤ 3.0
First Side	≤ -14
Sidlobe	$52 - 10\lg(D/\lambda) - 25\lg(\theta)\text{dBi}$ ($100\lambda/D$) $^\circ \leq \theta \leq 20^\circ$

MECHANICAL SPECIFICATION

Antenna Diameter	1.8m
Antenna Type	Offset antenna
Drive Mode	Manual
Antenna Pointing Range	
Azimuth	$0^\circ - 360^\circ$
Elevation	$5^\circ - 90^\circ$
Polarization	$\pm 90^\circ$

ENVIRONMENTAL SPECIFICATION

Operational Wind Speed	20m/s
Repeat Wind Speed	40m/s
Survival Wind Speed	60m/s
Ambient Temperature	$-20^\circ - 55^\circ$
Relative Humidity	5%-95%

