

13M EARTH STATION ANTENNAS

ANTESKY has a selected range of VSAT antenna (Ku-Band, C-Band, Ka-Band), NWIEE antenna, Earth Station Antenna Control System and Tracking Systems.



Antenna Accessory

- Motorization Kits
- 50 Satellite Positions Preset
- Limit Switches
- Steptrack
- ODU Support Kits
- Factory Feed System Testing and Documentation
- Ocean Transport Packing
- Foundation Kit
- Lightening Rod Kit
- Grounding Kit
- Cable-Mounting Kit
- Major Subsystem Spare Part Kits
- Anti-icing and Deicing

Features

- Meets or Exceeds CCIR 580 and INTELSAT Requirements
- High G/T, Excellent Pattern Characteristics
- Thermal Spaying Zinc Steel Ground Mount Assembly
- C-band Antenna Operating in 800MHz Bandwidth Option
- 2-port, 3-port or 4-port Linear/Circular Feed
- Field Changeable Feed System, Switchable Circular to Linear C-band
- Antenna Az 0-360deg Continuous Pointing Range

13M C/KU ANTENNA WITH 4-PORT LINEAR/CIRCULAR POL. FEED

ELECTRICAL SPECIFICATION

Type	ATSK-1300C			
Operating Frequency, GHz	C-Band		Full C-Band	
	Receive	Transmit	Receive	Transmit
		3.625~4.2	5.85~6.425	3.4~4.2
Gain, Mid-band, dBi	53.10	56.60	56.52	53.00
Polarization	Linear/ Circular			
XPD (on Axis), dB	35	35	35	35
XPD across 1dB Beam Width, dB	30	30	30	30
Axial Ratio (dB) for Circular Pol.	0.5	0.5	0.5	0.5
VSWR				
Linear Pol.	1.3	1.3	1.3	1.3
Circular Pol.	1.25	1.25	1.25	1.25
Antenna Noise Temperature, 2/4-port feed				
5° Elevation	48°K		54°K	
10° Elevation	36°K		46°K	
20° Elevation	29°K		36°K	
40° Elevation	24°K		30°K	
-3dB Beam Width	0.37°	0.25°	0.37°	0.25°
Tx. Power Capability, KW		5		5
Feed Interface	CPR-229F	CPR-137F	CPR-229F	CPR-137F
Feed Insertion Loss, dB	0.3	0.3	0.3	0.3
Isolation, Tx to Rx, dB	85			
Radiation Pattern:First Sidelobe	≤-14, Meet ITU-RS.580-5 and other requirements			

13M KU BAND ANTENNA WITH 4-PORT FEED

ELECTRICAL SPECIFICATION

Type	ATSK-1300K	
Operating Frequency, GHz	Receive	Transmit
		10.95~12.75
Gain, Mid-band, dBi	$62.6+20\lg [f(\text{GHz})/12.5]$	$63.6+20\lg [f(\text{GHz})/14.25]$
Polarization	Linear/ Circular	
XPD (on Axis), dB	35	35
XPD across 1dB Beam Width, dB	30	30
Axial Ratio (dB) for Circular Pol.	0.5	0.5
VSWR		
Linear Pol.	1.3	1.3
Circular Pol.	1.25	1.25

Antenna Noise Temperature		
5° Elevation	87°K	
10° Elevation	73°K	
20° Elevation	65°K	
40° Elevation	50°K	
-3dB Beam Width	0.13°	0.11°
Tx. Power Capability	1kw cw	
Feed Interface	WR75	WR75
Feed Insertion Loss, dB	0.5	0.6
Port to Port Isolation, dB		
Tx to Rx	85	
Rx to Rx	CP: 20 LP: 30	
Tx to Tx	CP: 20 LP: 30	
Radiation Pattern:First Sidelobe	≤-14, Meet ITU-RS.580-5 and other requirements	

MECHANICAL SPECIFICATION

Azimuth	180° in two 100° overlapping sectors continuous
Elevation	0°~90°
Polarization	±90°
Finishes	
Reflector Surface	Aluminum panels with high-diffusing white paint
Pedestal & Back Structure	Hot-dipped galvanization
Antenna Drive Mode	AC motor Drive per Az, El and Pol.

ENVIRONMENTAL SPECIFICATION

Operational Wind	50km/h Gusting to 97km/h
Survival Wind	200km/h
Rain	Up to 100mm/h operational and survival
Relative Humidity	Up to 100% operational and survival
Solar Radiation	1000 Kcal/M ² /h
Temperature	- 40°C to 50°C
Radial Ice(Survival)	25mm on all surface or 13mm on all surface with 130km/h wind gusts
Shock and Vibration	As encountered during shipment by commercial air, sea, etc.
Corrosive atmosphere	As encountered in coastal regions and/or heavily industrialized areas
Seismic (Survival)	0.3g (H), 0.1g (V)