
NWIEE 2.4M VSAT ANTENNA

NWIEE designed and manufactured in batches 2.4-meter compact Cassegrain all aluminum reflector antenna for VSAT applications in both C band (Model C24T) and Ku band (Model Ku24T).

C24T and Ku24T are compact Cassgrain reflector mounted on a Az. over El. pedestal providing necessary stiffness and pointing accuracy required in C and Ku band operation. It is provided with a Rx/Tx (2 ports) feed with corrugated horn and OMT and is of optimized R.F.

specifications, operates in circular or linear polarization selectable manually and meets any requirements of customers for particular applications.

C24T and Ku24T antennas meet the regulations of CCIR 580-5 and have been type approved by INTELSAT, ASIASEAT, APSTAR, INTELSAT, SINOSAT, OREINTSAT and CHINASAT. NWIEE 2.4M antenna can enter their Network without the need of certification test after installation on sites.

NWIEE 2.4M C / KU BAND ANTENNA IN				
R.F. SPECIFICATION	C-BAND		Ku-BAND	
	RECEIVE	TRANSMIT	RECEIVE	TRANSMIT
Frequency in GHz*	3.625-4.200	5.850-6.425	10.95-12.75	14.0-14.5
Gain	38.2	41.4	47.5	49.0
Antenna Noise Temp.				
10°Elevation	38K		52K	
20°Elevation	31K		44K	
40°Elevation	24K		38K	
Sidelobe Pattern	First sidelobe level ≤-14Db Beyond first sidelobe meet IESS(Intelsat) or CCIR 580-4 Recommendation			
VSWR	1.3:1 (LP) 1.25:1 (CP)	1.3:1 (LP) 1.25:1 (CP)	1.25:1	1.25:1
Sidelobe envelop	CCIR-580	CCIR-580	CCIR-580	CCIR-580
Axial Ratio(CP only)	1.5dB	0.5dB		
Feed Insertion or Ohmic Loss	0.15dB	0.18dB	0.4dB	0.4dB
Power Handling Capability	2 Kw		1 Kw	
Port to Port Isolation	85dB		80 dB	
Feed Interfaces	CPR-229F	CPR-137F	WR75	WR75

NOTE: All values are at the rear feed output flange.

* The frequency range are Rx: 3.625-3.7GHz/Tx: 6.425-6.725GHz or Rx: 3.625-4.2GHz

/Tx:5.85-6.425GHz optional in Linear and Circular polarization.

** The other operational frequency bands of NWIEE VSAT antennas can be of

10.95- 11.7GHz or 11.7-12.2GHz even extended as 10.95-12.75GHz.

MECHANICAL SPECIFICATIONS	
Azimuth Travel	$\pm 180^\circ$
Elevation Travel	5° to 90°
Polarization Travel	$\pm 90^\circ$
Reflector	Aluminum
Backup Structure	Steel
Pedestal Structure	Steel
Finish	
Reflector Surface	Aluminum panels with heat-diffusing white paint
Pedestal and Steel Structure	Sand blast and hot spray galvanized and two times paint
Antenna drive mode	Manual , Motorization drive optional

ENVIRONMENTAL SPECIFICATIONS	
Operation Wind	50km/h gusts to 97km/h
Survival Wind	200km/h
Ambient Temperature	-40°C to 60°C
Rain	10cm/h
Relative Humidity	0% to 100% without condensation
Solar Radiation	1000 kcal/M ² /h
Radial Ice (Survival)	2.5cm radial
Shock and Vibration	As encountered during shipment by commercial air, sea or truck
Corrosive atmosphere	As encountered in coastal regions and/or heavily industrialized areas
Seismic(Survival)	0.3G's horizontal 0.1G's vertical