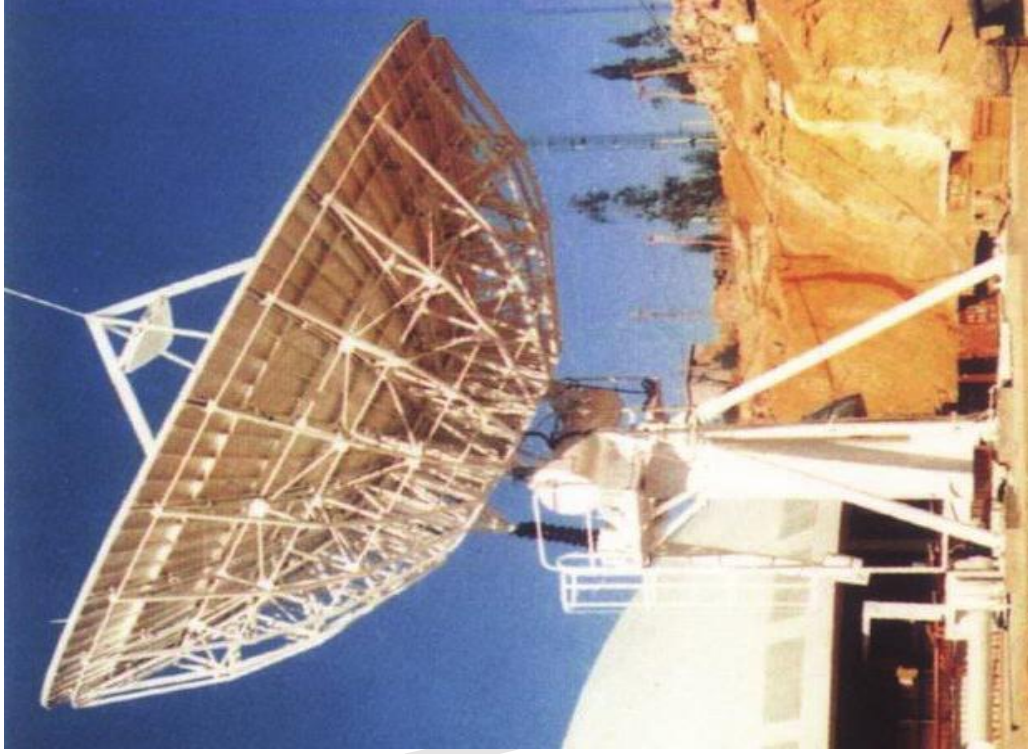
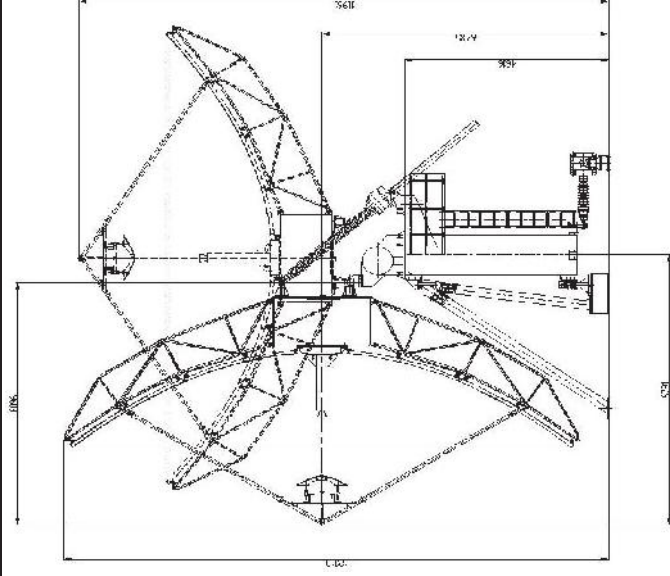


11.3Meter Earth Station Antenna



General Description

The 11.3-meter antenna delivers exceptional performance for transmit/receive and receive only applications for L through Ka-band frequencies. This antenna offers a reflector design that incorporates precision-formed panels, truss radials and hub assembly using matched tooling for interchangeable components. It features an innovative Cassegrain or Ring Focus feed and sub-reflector design which results in high gain, low noise temperature, high antenna efficiency and excellent rejection of noise and microwave interference. A large center hub provides spacious accommodation for equipment mounting. The reflector is supported by a galvanized elevation over azimuth kingpost pedestal that provides the required stiffness for pointing and tracking accuracy. The pedestals are designed for full orbital arc coverage and are readily adaptable to ground or rooftop installations.



Highlighted Features:

- *Meets CCIR 580 and INTELSAT Requirements
- *Precisely adjusted before leaving factory, and no need theodolite to adjust the panel accuracy.
- *High precision alloy aluminum main reflector.
- *Hot spray galvanized with white paint
- *CP/LP switchable feed
- *High RF performance
- *Galvanized stainless steel hardware
- *Different frequency ranges from many feed configurations
- *Ka band antenna with rotary pedestal is available
- *A large hub for install RF equipments
- *Multi-layer anti-corrosion treatment.

Options

- *L, S, X, Ka bands and multi-bands
- *Customer feed system design
- *800MHz Extended C band is available
- *Full motion antenna
- *Feed blower or deicing sub-system with automatic controls
- *Two or four Tx/Rx port in linear or circular polarized feeds
- *Antenna control system with tracking
- *ODU Support Kits
- *Increase the surface spray zinc thickness along seaside.

Antenna Accessory

- *Motorization Kits
- *Limit Switches
- *Factory Feed System Testing and Documentation
- *Ocean /Air Transport Packing
- *Foundation Kit
- *Grounding Kit Cable-Mounting Kit

Technical Specification

Electrical Specification										
Type	RNA113T		RNB113T		RNC113T		RND113T		RNE113T	
	Standard C band		Extended C band		Insat C band		Ku Band		DBS Band	
Operating Frequency, GHz	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit
Typical Gain, Mid-band, dBi	3.625~4.2	5.85~6.425	3.4~4.2	5.85~6.725	4.5~4.8	6.725~7.025	10.70~12.75	13.75~14.5	10.70~12.75	17.3~18.4
Polarization	51.4	55.3	51.2	55.5	52.9	54.3	60.6	62.2	60.6	64.1
XPD(on Axis), dB(Linear)	Linear/circular		Linear/circular		Linear/circular		Linear		linear	
XPD across 1dB Beam Width, dB(Linear)	35	35	35	35	35	35	35	35	35	35
Axis Ratio, dB (Circular)	30	30	30	30	30	30	30	30	30	30
VSWR	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Antenna Noise Temperature (4 Port Feed)	1.25	1.25	1.30	1.30	1.25	1.25	1.30	1.30	1.30	1.30
10° Elevation	46K		48K		49K		78K		77K	
30° Elevation	39K		42K		42K		70K		67K	
50° Elevation	36K		39K		40K		64K		63K	
-3 dB Beam Width, Mid-band	0.44°	0.28°	0.45°	0.27°	0.37°	0.31°	0.15°	0.13°	0.19°	0.10°
Typical G/T (EL=10°)	32.6dB/K (30K LNA)		32.2dB/K (30K LNA)		33.9dB/K (30K LNA)		38.9dB/K (70K LNA)		38.8dB/K (70K LNA)	
Tx, Total Power Capability, KW	5	5	5	5	5	5	2	2	2	2
Feed Interface	CPR229F	CPR137F	CPR229F	CPR137F	CPR229F	CPR137F	WR-75	WR-75	WR-75	WR-62
Feed Insertion Loss, dB	0.4	0.3	0.4	0.3	0.4	0.3	0.5	0.4	0.5	0.5
Isolation, Tx to Rx, dB	85	85	85	85	85	85	85	85	85	85
Tx/Tx, Rx/Rx, dB (linear)	30	30	30	30	30	30	30	30	30	30
Tx/Tx, Rx/Rx, dB (Circular)	20	20	20	20	20	20	20	20	20	20
Sidelobes	CCIR 580-5									
Mechanical Specification										
Antenna Diameter	11.3m									
Antenna Type	Cassagrain									
Surface Accuracy (RMS)	±0.5mm									
Reflector Construction	16 precision-formed aluminum panels with heat-diffusing white paint. Hot spray galvanized back structure.									
Mount type	Kingpost pedestal Turn table									
Antenna Pointing Range	Azimuth Elevation Polarization									
Drive Mode	Motorized									
Motor Drive System	Azimuth Travel Rate		Elevation Travel Rate		Polarization Travel Rate		Turn table			
	0.020°/S		0.021°/S		1°/S		0.003°-0.3°/S 0.003°-0.3°/S 1°/S			
Environmental Specification										
Operational Wind	79km/h gusting to 126km/h									
Survival Wind	200km/h(at zenith) -40°~+60°									
Temperature	100%									
Relative Humidity	1135Kcal/h/m ²									
Solar Radiation	0.3g(H), 0.15g(V)									
Seismic(Survival)	13mm Operational; 25mm Survival									
Ice Loading										