

Earth Station Antenna

Model NS-SEC-180 1.8m Antenna

Characteristics:

- Meets or exceeds CCIR 580 and Intelsat requirements;
- Meets Intelsat, Asiasat, Chinasat network access requirement;
- Offset / Ring focus designed;
- High gain, Low sidelobe, High G/T rate;
- Hot-dip zinc processed steel parts, with strong corrosion resistant ability;



Optional Characteristics:

- Aluminum / Carbon fiber optional;
- C band, Ku band, Ka band, S band, QV band, customized frequency available;
- Limited-motion/Semi-turntable/Full-motion optional.
- Rx/Tx or 2Rx/2Tx;
- Two(2) and Three(3) Axis Motorization kit;
- Lightning protection;
- De-icing for Reflector and Sub reflector;
- Single speed or dual speed controller.



RF SPECIFICATIONS

	NS-SEC(C)-180		NS-SEC(Ku)-180		NS-SEC(Ka)-180	
Frequency	3.625~4.2GHz	5.85~6.425GHz	10.95~12.75GHz	13.75~14.5GHz	17.7~21.2GHz	27.5~31GHz
Gain, dBi	35.22@3.95GHz	39.1@6.2GHz	45.22@12.5GHz	46.6@12.25GHz	48.9@19.95GHz	52.37@29.75GHz
Polarization	Circular/Linear		Linear ≤35dB		Linear / Circular	
Cross-pol on Axis						
VSWR	1.25:1	1.25:1	1.25:1	1.25:1		1.35:1
Axial ratio 2 port	1.3 dB	1.09 dB	/	/	1.5 dB	1.5 dB
Axial ratio 4 port	0.75 dB	0.75 dB	/	/	0.5 dB	0.5 dB
Feed insertion loss	≤0.2dB	≤0.2dB	≤0.2dB	≤0.2dB	0.5dB	0.4dB

Antenna Noise Temperature

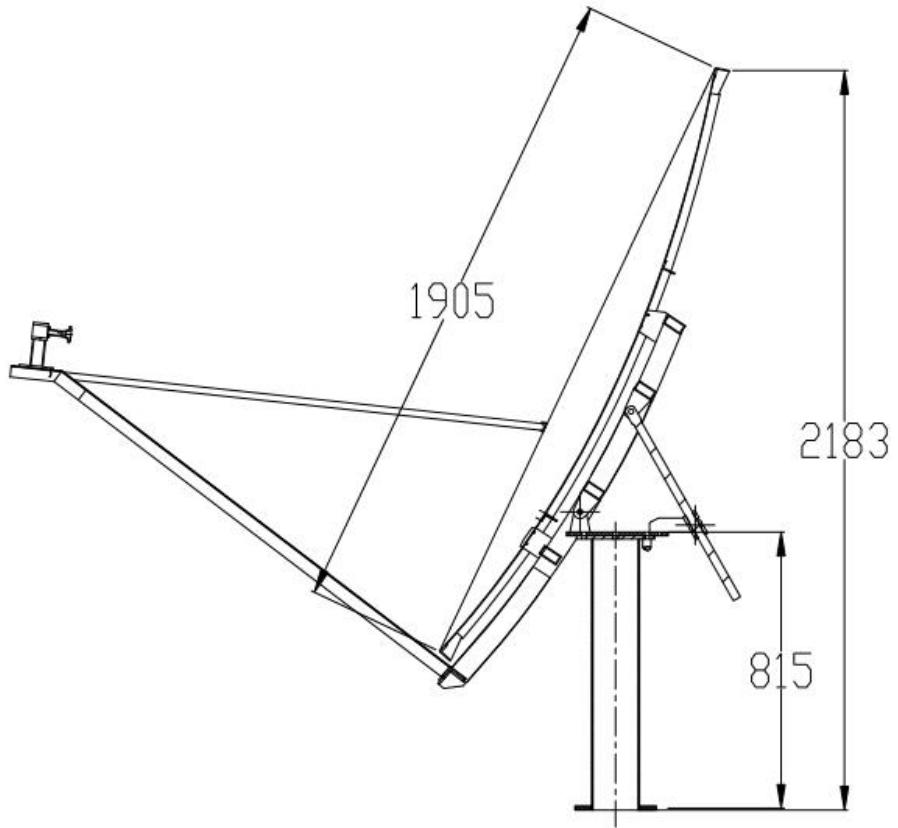
10° Elevation	39 K		43K		126 K	
20° Elevation	29K	/	36K	/	85K	/
40° Elevation	26 K		32K		80K	
-3dB Beam width	2.85°	1.82°	0.9°	0.79°	0.59°	0.395°
Power capacity	/	5KW	/	2KW	/	2KW
Feed interface	CPR-229G	CPR-137G	WR-75	WR-75	WR-42	WR-28
Isolation, Rx to Tx,		85 dB		85 dB		85 dB
First Sidelobe		≤-14dB		≤-14dB		≤-14dB
90% Peaks under Following envelop		29 - 25 logθ(1° ≤θ<20°)		29 - 25 logθ(1° ≤θ<20°)		29 - 25 logθ(1° ≤θ<20°)

MECHANICAL SPECIFICATIONS

Antenna Diameter			1.8m	
Antenna travel range	AZ	EL	0° ~360° (continuous)	
	EL	Pol	5° ~90°	
Antenna Type			±90°	
Structure			Offset / Ring focus	
Drive Mode			EL over AZ	
Surface accuracy(R.M.S)			Manual/Motorized	
			≤0.5mm(Ku)	
			≤0.3mm(Ka)	

ENVIRONMENT SPECIFICATIONS

Working wind speed	72km/h
Survival wind speed	216km/h
Humidity	100%
Ice load	Icing 13mm: normal work Icing 25mm, no damage
Temperature	-30~50°C
Seismic capacity	Horizontal: 0.3G; vertical: 0.1G
Working wind speed	72km/h



Antenna package:

One set, total: 2 packages, dimension: 2.06 CBM, net weight: 95kg, gross weight: 195kg;
Loading capacity: 10sets for one 20ft container; 30sets for one 40GP container.

Note:

Weight and dimensions for reference only;
Can vary depends on options chosen;
Please confirm with us prior to any shipment.