

Earth Station Antenna Model NS-SEC-450 4.5m Antenna

Characteristics:

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



Optional Characteristics:

- X band, C band, Ku band, Ka band, S 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)-450****NS-SEC(Ku)-450****NS-SEC(Ka)-450**

	3.625~4.2GHz	5.85~6.425GHz	10.95~12.75GHz	13.75~14.5GHz	17.7~21.2GHz	27.5~31GHz
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	43.19 dBi	47.56 dBi	53.85 dBi	54.83dBi	57.49 dBi	61.16 dBi
Polarization	Circular/Linear		Linear		Circular	
Cross-pol on Axis			≥30dB		/	
VSWR	1.25:1	1.25:1	1.25:1	1.25:1	1.35:1	
Axial ratio 2 port	≤1.3dB	≤1.3dB	≤1.3dB	≤1.3dB	≤1.5 dB	≤1.5 dB
Axial ratio 4 port	0.5 dB	0.5 dB	/	/	1 dB	1 dB
Feed insertion loss	≤0.2dB	≤0.2dB	≤0.2dB	≤0.2dB	0.6dB	0.6dB

Antenna Noise Temperature

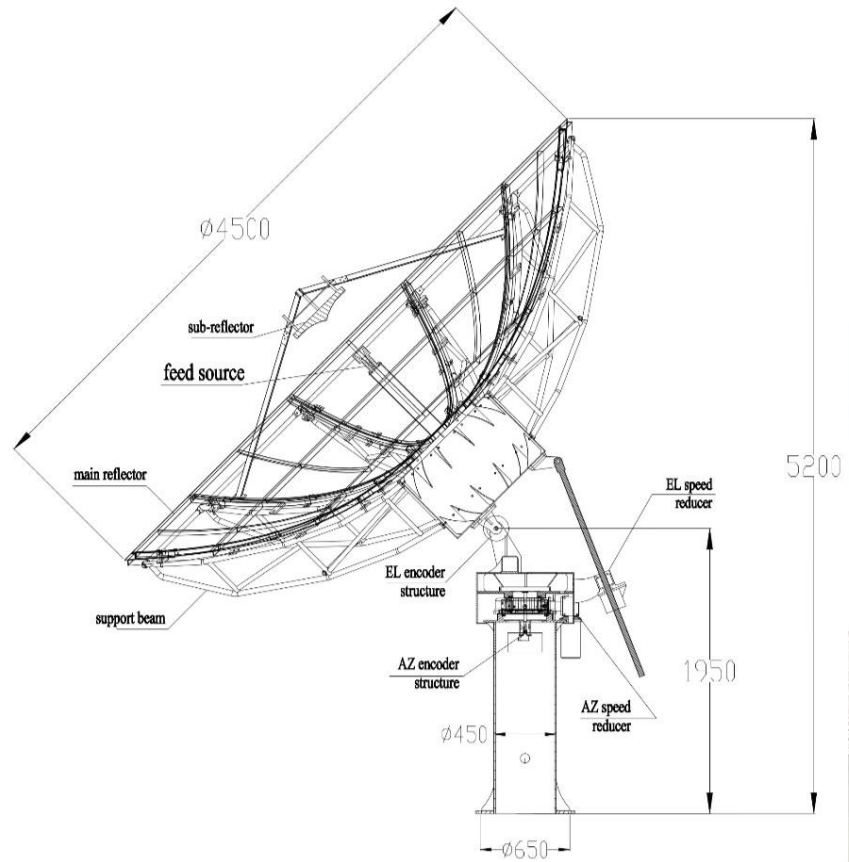
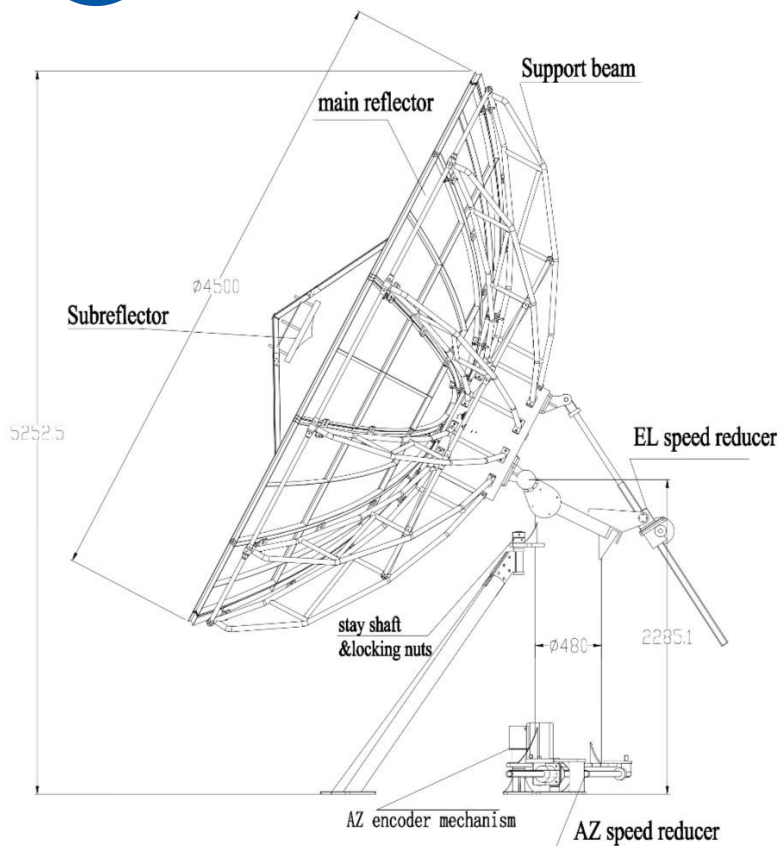
10° Elevation	35 K		56K		116 K	
20° Elevation	24K	/	48K	/	86K	/
40° Elevation	23 K		44K		72K	
-3dB Beam width	1.16°	0.71°	0.39°	0.32°	0.23°	0.15°
Power capacity	/	5KW	/	2KW	/	2KW
Feed interface	CPR-229G	CPR-137G	WR-75	WR-75	WR-42	WR-28
Isolation, Rx to Tx,	90 dB		85 dB		85 dB	
First Sidelobe	≤-14dB		≤-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		4.5m
Antenna travel range	AZ	5° ~355° (continuous)
	EL	5° ~90°
	Pol	±90°
Antenna Type		Ring focus
Structure		LMC/FMC
Drive Mode		Manual/Motorized
Surface		≤0.5mm(Ku)
accuracy(R.M.S)		≤0.3mm(Ka)

ENVIRONMENT SPECIFICATIONS

Working wind speed	72km/h
Suvival 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:

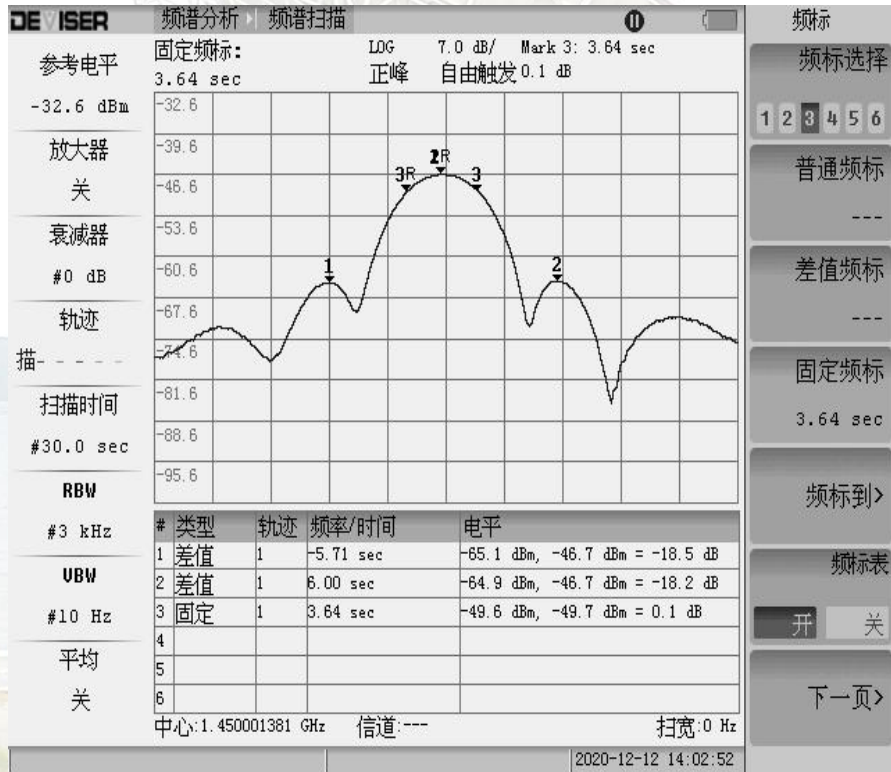
Manual type Total: 4 packages, dimension: 8 CBM, net weight: 1070kg, gross weight: 1280kg;
 Motorized type: Total: 5 packages, dimension: 9.2 CBM, net weight: 1200kg, gross weight: 1627kg

Note:

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

Antenna pattern

AZ



EL

