

4.5m Earth Station Antenna



SilverSatcom 4.5 M antenna exceptional performance makes it an excellent choice for all applications. incorporates stretch - formed doubly contoured panels with matched radials and hub for ease of field alignment provide an accurate surface contour, and extraordinary gain .

The standard designed azimuth over elevation pedestal provides a cost-effective solution for high stiffness and stability, full orbital arc coverage and fine drive performance, and ensures the pointing accuracy.

It is widely and ideally used for Broadcasters, Service Providers, GSM operator, Satellite operator, Military and Government Agencies, FreeLands or Rescue organizations

Features :

- Outstanding RF Performance
- Galvanized stainless steel construction
- Meets CCIR 580 and INTELSAT Requirements
- C,Ku,X,Ka frequencies ranges are available
- CP/LP Switchable feed
- Fixed or motorized option
- Reflector Deicing available

Electrical Specification					
Type		SSA45T		SSA45T	
Operating Frequency, GHz		C-Band		Ku-Band	
		Receive	Transmit	Receive	Transmit
		3.625~4.2	5.85~6.425	10.95~12.75	13.75~14.5
Gain, Mid-band, dBi		43.64	47.22	52.94	54.25
Polarization		Linear/Circular		Linear	
XPD(on Axis), dB		35	35	35	35
XPD across 1dB Beam Width, dB		33	33	33	33
Axial Ratio (Circular-Polarized)	2-Port Feed	1.30	1.09		
	4-Port Feed	1.06	1.06		
VSWR		1.25	1.25	1.25	1.25
Antenna Noise Temperature 2-port feed					
	10° Elevation	34K		52K	
	30° Elevation	24K		41K	
	50° Elevation	21K		37K	
-3 dB Beam Width, Mid-band		1.08°	0.72°	0.37°	0.32°
Typical G/T (EL>10°)		25.9dB/K (30° LNA)		32.3dB/K (70° LNA)	
Tx. Power Capability, KW			5		2
Feed Interface		CPR—229F	CPR—137F	WR-75	WR-75
Feed Insertion Loss, dB		0.2	0.2	0.25	0.25
Isolation, Tx to Rx, dB		85		85	
First Side lobe 90% Peaks under Following Envelop		-14 29-25log θ (1° $\leq\theta$ < 20°)		-14 29-25log θ (1° $\leq\theta$ < 20°)	
Mechanical Specification					
Antenna Diameter		4.5m			
Antenna Type		Dual Reflector Modified ring focus			
Surface Accuracy(RMS)		$\leq 0.35\text{mm}$			
Antenna Pointing Range		Azimuth Elevation		$\pm 85^\circ$ 0°~90°(Continuous)	
Drive Mode		Manual or Motorized			
Motor Drive	Azimuth Travel Rate		0.11°/S(0.06°/S)		
	Elevation Travel Rate		0.17°/S(0.08°/S)		
Environmental Specification					
Operational Wind		72km/h gusting to 97km/h			
Survival Wind		216km/h			
Temperature		-40°~+60°			
Relative Humidity		100%			
Solar Radiation		1135Kcal/h/m ²			
Seismic(Survival)		0.3g(H), 0.15g(V)			
Ice Loading		13mm Operational; 25mm Survival			