



## SUNCOM 1.8M KA BAND ANTENNA

### Features

- High G/T, excellent pattern characteristics
- Factory feed system testing
- All of steel parts to be processed by hot dipped zinc
- Foundation hardware kit included
- Air or ocean transport packing

### Options

- Specialized feed systems
- Antenna control system with tracking (Steptrack, Program Tracking and Inclined Orbit Tracking)
- Reflector and feed deicing systems
- ODU Support Kits
- Lightning Rod Kit
- Grounding Kit
- Cable-Mounting Kit
- Turnkey installation and testing
- Non-penetrating mount
- High wind configuration
- Extended Az travel



**Notice: For any specialized request please contact Suncom sales office**

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### ELECTRICAL SPECIFICATION

Type	SCE(KA)180	
	Receive	Transmit
Operating Frequency, GHz	Standard Band 18.3~21.2	Standard Band 29~30
	Custom band 17.70~21.20	Custom band 27.5~31
Gain, Mid-band, dBi	49.1	52.4
Polarization	Linear/Circular	
XPD (on Axis), dB	35	35
Axial Ratio (Circular-Polarized)		1.2
VSWR	1.3	1.3
Antenna Noise Temperature		
5° Elevation	160°K	
10° Elevation	130°K	
20° Elevation	105°K	
40° Elevation	92°K	
-3dB Beam Width, Mid-band	0.5°	0.32°
-10dB Beam Width, Mid-band	1.09°	0.65°
Tx. Power Capability		500W
Feed Interface	WR42	WR28
Feed Insertion Loss	0.6	0.4
Isolation, Tx to Rx, dB	90	
First Sidelobe	-14	
90% Peaks under Following Envelop	29-25log $\theta$ ( $1^\circ \leq \theta < 20^\circ$ )	

### MECHANICAL SPECIFICATION

Antenna Diameter	1.8m
Antenna Type	Ringfocus
Mount Type	El. over Az.
Surface Accuracy (RMS)	$\leq 0.2\text{mm}$
Antenna Pointing Range	
Azimuth	0°~360°, $\pm 10^\circ$ (Continuous)
Elevation	0°~90° (Continuous)
Polarization	360° (Continuous)
Drive Mode	Manual or Motorized
Materials of reflector	Aluminum alloy
Finish of steel parts	Hot dipped zinc

### ENVIRONMENTAL SPECIFICATION

Operational Wind	72km/h Gusting to 97km/h
Survival Wind	216km/h
Temperature	-40°C ~ +60°C
Relative Humidity	100%
Solar Radiation	1135Kcal/ h/ m <sup>2</sup>
Seismic (Survival)	0.3g (H), 0.15g (V)
Ice Loading	13mm Operational; 25mm Survival