

## **SUNCOM 13M ANTENNA**

## **Features**

- Meets or exceeds ITU-RS 580-5 and INTELSAT requirements
- High G/T, excellent pattern characteristics
- Self-aligning aluminum reflector, no field alignment
- Factory feed system testing
- All of steel parts to be processed by hot dipped zinc
- 2-port or 4-port Linear/Circular Feed



13m antenna installed in China

- > Field changeable feed system, switchable circular to linear C-band
- Foundation hardware kit included
- > Air or ocean transport packing

## **Options**

- Specialized feed systems (e.g extended ,multi-band, DBS band )
- 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
- High wind configuration
- Extended Az travel

## For any specialized request please contact Suncom sales office

China Sun Communication Group Limited Building C, Hangchuang International Plaza, No 239 Shenzhou 4th Road, Xi'an, China 710100

Email: sales@chinasuncom.com

Phone: +86 29 84160923 Fax: +86 29 84160923-16



| ELECTRICAL SPECIFICATION  |                      |   |  |            |  |
|---|----------------------|---|--|------------|--|
| Туре  | 1300FC               |   | 1300FK   |            |  |
| Operating Frequency, GHz  | C-Band               |   | Ku-Band  |            |  |
|   | Receive              | Transmit  | Receive  | Transmit   |  |
|   | 3.4~4.2              | 5.85~6.725  | 10.95~12.75                                    | 13.75~14.5 |  |
| Gain, Mid-band, dBi   | 53.4                 | 57.2  | 62.57  | 63.57      |  |
| Polarization  | Linear/ Circular     |   | Line   | ear        |  |
| XPD (on Axis), dB   | 35                   | 35  | 35   | 35         |  |
| XPD across 1dB Beam Width, Db   | 33                   | 33  | 33   | 33         |  |
| Axial Ratio (Circular-Polarized) 2 port/4 port                                | 1.30/1.06            | 1.09/1.06   |  |            |  |
| VSWR  | 1.25                 | 1.25  | 1.25   | 1.25       |  |
| Antenna Noise Temperature<br>10° Elevation<br>20° Elevation<br>40° Elevation  | 46°K<br>36°K<br>31°K |   | 57°K<br>47°K<br>43°K                           |            |  |
| -3dB Beam Width, Mid-band   | 0.379°               | 0.249°  | 0.122°   | 0.109°     |  |
| Tx. Power Capability, KW  |                      | 5   |  | 2          |  |
| Feed Interface  | CPR-229G             | CPR-137G  | WR-75  | WR-75      |  |
| Feed Insertion Loss   | 0.2/0.25             | 0.2/0.25  | 0.25/0.35                                      | 0.25/0.4   |  |
| Isolation, Tx to Rx, dB   | 90                   |   | 85   |            |  |
| First Sidelobe<br>90% Peaks under Following Envelop                           | Meet with ITU-RS!    |   | 580-5 and INT                                  | ELSAT      |  |
| MECHANICAL SPECIFICATION  |                      | 1   | 10   |            |  |
| Antenna Diameter  |                      | 13 m  |  |            |  |
| Antenna Type  |                      | Cassegrain El. over Az.   |  |            |  |
| Mount Type Surface Accuracy (PMS)   |                      |   |  |            |  |
| Surface Accuracy (RMS)  |                      |   | ≤ 0.5mm  |            |  |
| Antenna Pointing Range     Azimuth     Elevation     Polarization  Drive Mode |                      | 180° (in two 100° overlapped sectors) 5°~90°(Continuous) 180°(Continuous) Motorized |  |            |  |
| Motor Drive System Azimuth Travel Rate Elevation Travel Rate Polarization     |                      | 0.02° /S ( 0.15° /S )<br>0.02° /S ( 0.15° /S )<br>1° /S                             |  |            |  |
| <b>ENVIRONMENTAL SPECIFICATION</b>  | NC                   |   |  |            |  |
| Operational Wind  |                      | 72km/h Gusting to 97km/h  |  |            |  |
|   | Survival Wind        |   | 216km/h  |            |  |
| Survival Wind   |                      |   | Z TOKITI/TI                                    |            |  |
| Survival Wind Temperature   |                      |   | $-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$ | <u> </u>   |  |
|   |                      |   |  |            |  |
| Temperature   |                      |   | -40°C ~ + 60°C                                 |            |  |
| Temperature Relative Humidity   |                      |   | -40°C ~ + 60°C                                 |            |  |