



SUNCOM 1.8METER 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 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, Ka 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
- Non-penetrating mount
- High wind configuration

Notice: For any specialized request please contact Suncom sales office

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ELECTRICAL SPECIFICATION

| Type | 180FC | | 180FK | |
|-----------------------------------|--|----------|--|-------------|
| | C-Band | | Ku-Band | |
| Operating Frequency, GHz | Receive | Transmit | Receive | Transmit |
| | | 3.4~4.2 | 5.85~6.725 | 10.95~12.75 |
| Gain, Mid-band, dBi | 35.5 | 39.5 | 45.3 | 46.5 |
| Polarization | Linear/ Circular | | Linear | |
| XPD (on Axis), dB | 35 | 35 | 35 | 35 |
| Axial Ratio (Circular-Polarized) | 1.30 | 1.09 | | |
| VSWR | 1.25 | 1.25 | 1.25 | 1.25 |
| Antenna Noise Temperature | | | | |
| 10° Elevation | 39°K | | 43°K | |
| 30° Elevation | 29°K | | 36°K | |
| 50° Elevation | 26°K | | 32°K | |
| -3dB Beam Width, Mid-band | 2.88° | 1.9° | 0.87° | 0.74° |
| Tx. Power Capability, KW | | 3 | | 1 |
| Feed Interface | CPR-229G | CPR-137G | WR-75 | WR-75 |
| Feed Insertion Loss | 0.2 | 0.2 | 0.25 | 0.2 |
| Isolation, Tx to Rx, dB | 90 | | 85 | |
| First Sidelobe | -14 | | -14 | |
| 90% Peaks under Following Envelop | 29-25log θ ($1^\circ \leq \theta < 20^\circ$) | | 29-25log θ ($1^\circ \leq \theta < 20^\circ$) | |

MECHANICAL SPECIFICATION

| | |
|------------------------|---|
| Antenna Diameter | 1.8m |
| Antenna Type | Offset |
| Mount Type | El. over Az. |
| Surface Accuracy (RMS) | $\leq 0.5\text{mm}$ |
| Antenna Pointing Range | |
| Azimuth | $0^\circ \sim 360^\circ, \pm 10^\circ$ (Continuous) |
| Elevation | $0^\circ \sim 90^\circ$ (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 | $-40^\circ\text{C} \sim +60^\circ\text{C}$ |
| Relative Humidity | 100% |
| Solar Radiation | 1135Kcal/ h/ m^2 |
| Seismic (Survival) | 0.3g (H), 0.15g (V) |
| Ice Loading | 13mm Operational; 25mm Survival |