

## GS4.5m Rx antenna

### Key Features

- \* Meets CCIR 580-5 and INTELSAT Requirements
- \* High G/T, Excellent Pattern Characteristics
- \* Hot-dipped Galvanized Steel Ground Mount Assembly
- \* Stretch Formed Aluminum Reflector with High Precision.
- \* C-band/ku-band/ka-band/S-band/L-band frequency
- \* High Erosion Resistance
- \* Foundation Hardware Kit included
- \* Ocean or Air Transport Packing
- \* Excellent in Stability
- \* Survives 125 mph Winds

### Antenna accessories

- \* Motorized kits
- \* Single/Dual Polarization as option
- \* Linear Polarization or Circular Polarization to C band
- \* Factory Feed System Testing and Documentation
- \* Grounding kit
- \* Lightning Rod Kit
- \* Cable-Mounting Kit
- \* Major Subsystem Spare Part Kits
- \* Anti-icing and Deicing

### ELECTRICAL SPECIFICATION

| ANTENNA           | C-BAND         | Ku-BAND                            |                                |
|-------------------|----------------|------------------------------------|--------------------------------|
| Frequency         | 3.4-4.2GHz     | 10.95-12.75 GHz                    |                                |
| VSWR              | 1.3:1          |                                    |                                |
| Insertion Loss    | 0.25dB         | 0.3dB                              |                                |
| Isolation         | 35dB           |                                    |                                |
| Feed Interface    | WR229          | WR75                               |                                |
| 3dB Beamwidth     | 1.137°         | 0.381°                             |                                |
| Sidelobe Level    | D/λ≤100        | 52-10lg(D/λ)-25lgθ<br>10-10lg(D/λ) | 100λ/D≤θ≤48°<br>θ>48°          |
|                   | D/λ≥150        | 29-25lgθ<br>32-25lgθ<br>-10        | 1°≤θ≤20°<br>20°<θ≤48°<br>θ>48° |
|                   | First Sidelobe | ≤-14dB                             |                                |
|                   | Gain           | 43.19dB (F=3.8 GHz)                | 52.69dB (F=11.8 GHz)           |
| Noise Temperature | 35°K@10°       |                                    | 52°K@10°                       |

### MECHANICAL SPECIFICATION

|                      |                                    |  |
|----------------------|------------------------------------|--|
| Antenna Optics       | Feed-backward antenna              |  |
| Elevation Adjustment | 0°to 90°Continuous Fine Adjustment |  |
| Azimuth Adjustment   | manual                             | 0°to 360°Continuous Fine Adjustment              |
|                      | motorization                       | ±85° Continuous Adjustment (Into three sections) |

### ENVIRONMENTAL SPECIFICATION

|                    |                                     |         |                                  |
|--------------------|-------------------------------------|---------|----------------------------------|
| Wind Loading       | 45mph                               | 72kmph  | operational (Maintain Precision) |
|                    | 60mph                               | 97kmph  | operational (Decrease Precision) |
|                    | 125mph                              | 200kmph | Survival (Fixed Heavenward)      |
| Temperature        | -45°~50°C                           |         |                                  |
| Relative Humidity  | 0%~100%                             |         |                                  |
| Seismic (survival) | 0.3G's horizontal 0.15 G's vertical |         |                                  |