

## GS6.2M EARTH STATION ANTENNA

### Key Features

- \* Meets or Exceeds CCIR 580 and INTELSAT Requirements
- \* Ring Focus
- \* High G/T, Excellent Pattern Characteristics
- \* Hot-dipped Galvanized Steel Ground Mount Assembly
- \* C-band Antenna Operating in 800MHz Bandwidth Option
- \* 2-port, 3-port or 4-port Linear/Circular Feed
- \* Field Changeable Feed System, Switchable Circular to Linear C-band
- \* Antenna Az 0°~360°(Continuous) Pointing Range

### Antenna Accessories

- \* Motorization Kits
- \* 50 Satellite Positions Preset
- \* Limit Switches
- \* Steptrack
- \* ODU Support Kits
- \* Factory Feed System Testing and Documentation
- \* Ocean Transport Packing
- \* Foundation Kit
- \* Lightning Rod Kit
- \* Grounding Kit
- \* Cable-Mounting Kit
- \* Major Subsystem Spare Part Kits
- \* Deicing or Anti-icing

### ELECTRICAL SPECIFICATION

|                                  | C-Band           |            | Ku-Band     |            |
|----------------------------------|------------------|------------|-------------|------------|
|                                  | Receive          | Transmit   | Receive     | Transmit   |
| Operating Frequency, GHz         | 3.4~4.2          | 5.85~6.725 | 10.95~12.75 | 13.75~14.5 |
| Gain, Mid-band, dBi              | 46.5             | 50.3       | 56          | 57.4       |
| 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      |            | 2 port feed |            |
| 10° Elevation                    | 35°K             |            | 50°K        |            |
| 30° Elevation                    | 25°K             |            | 39°K        |            |

| 50° Elevation             | 22°K                     |          | 36°K                     |       |
|---------------------------|--------------------------|----------|--------------------------|-------|
| -3dB Beam Width, Mid-band | 0.83°                    | 0.54°    | 0.27°                    | 0.23° |
| Typical G/T ( EI>10° )    | 28.4dB/°K<br>( 30° LNA ) |          | 35.2dB/°K<br>( 70° LNA ) |       |
| Tx. Power Capability, KW  |                          | 5        |                          | 2     |
| Feed Interface            | CPR-229G                 | CPR-137G | WR-75                    | WR-75 |
| Feed Insertion Loss       | 0.25                     | 0.2      | 0.25                     | 0.25  |
| Isolation, Tx to Rx, dB   |                          | 90       |                          | 85    |
| Rx/Rx,Tx/Tx Linear,dB     |                          | 30       |                          | 30    |
| Rx/Rx,Tx/Tx Circular,dB   |                          | 22       |                          | 22    |
| Sidelobes                 | CCIR 580-5               |          |                          |       |

### MECHANICAL SPECIFICATION

|                        |                         |
|------------------------|-------------------------|
| Antenna Diameter       | 6.2m                    |
| Antenna Type           | Ring Focus              |
| Mount Type             | El. over Az.            |
| Surface Accuracy (RMS) | ≤ 0.5mm                 |
| Antenna Pointing Range |                         |
| Azimuth                | ±90 °, ±85°(Continuous) |
| Elevation              | 0°~90°(Continuous)      |
| Polarization           | 180°(Continuous)        |
| Drive Mode             | Manual or Motorized     |
| Motor Drive System     |                         |
| Azimuth Travel Rate    | 0.1 °/S (0.02°/S)       |
| Elevation Travel Rate  | 0.1°/S (0.02 °/S)       |
| Polarization           | 1°/S                    |

### 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 |

## GLOBAL STAR SATELLITE ANTENNA CO;LTD



Global Star@2011 Copyright