

## 6.2M VSAT Antenna

Self-aligning, stretch forming of aluminum reflector;  
 Ensure high-quality antenna structure  
 Assembly and test factory feed system;  
 Hot-dip galvanized structural steel  
 Compact packaging design for ease and low cost shipping.

| VSAT Antenna                             | 6.2M VSAT Antenna                               |               |                |               |
|--|---|---------------|----------------|---------------|
| Operating Frequency, GHz                 | C-Band  |               | Ku-Band        |               |
|  | Receive   | Transmit      | Receive        | Transmit      |
|  | 3.625 to 4.2                                    | 5.85 to 6.425 | 10.95 to 12.75 | 13.75 to 14.5 |
| Gain, Mid-band, dBi                      | 46.8  | 50.2          | 56.18          | 57.11         |
| Polarization                             | Linear/ Circular                                |               | Linear         |               |
| Axial Ratio (dB)                         | 1.30/1.06                                       | 1.09/1.06     |                |               |
| VSWR                                     | 1.25  | 1.25          | 1.25           | 1.25          |
| XPD (on Axis), dB                        | 35  | 35            | 35             | 35            |
| XPD across 1dB Beam Width, dB            | 33  | 33            | 33             | 33            |
| -3dB Beam Width(deg)                     | 0.81  | 0.53          | 0.27           | 0.23          |
| Antenna Noise Temperature, 2/4-port feed |   |               |                |               |
| 10deg Elevation                          | 35 K/42 K                                       |               | 63 K/67 K      |               |
| 20deg Elevation                          | 26 K/36 K                                       |               | 51 K/58 K      |               |
| 40deg Elevation                          | 24 K/33 K                                       |               | 49 K/52 K      |               |
| Tx. Power Capability, KW                 |   | 5             |                | 2             |
| Feed Interface                           | CPR-229G  | CPR-137G      | WR-75          | WR-75         |
| Feed Insertion Loss, dB                  | 0.25  | 0.2           | 0.25           | 0.25          |
| Isolation, Tx to Rx, dB                  | 85  |               |                |               |
| Radiation Pattern:First Sidelobe         | CCIR.580  |               |                |               |
| <b>Environmental</b>                     |   |               |                |               |
| Relative Humidity                        | 100%  |               |                |               |
| Operational Wind                         | 72km/h Gusting to 97km/h                        |               |                |               |
| Seismic (Survival)                       | 0.3g (H), 0.15g (V)                             |               |                |               |
| Temperature                              | - 40Deg.c to + 60Deg.c                          |               |                |               |
| Survival Wind                            | 216km/h   |               |                |               |
| Solar Radiation                          | 1135Kcal/ h/ m <sup>2</sup>                     |               |                |               |
| <b>Mechanical</b>                        |   |               |                |               |
| Surface Accuracy (RMS)                   | Less than 0.5mm                                 |               |                |               |
| Finishes                                 |   |               |                |               |
| Reflector Surface                        | Aluminum panels with high-diffusing white paint |               |                |               |
| Pedestal & Back Structure                | Hot-dipped Galvanized                           |               |                |               |
| Azimuth                                  | 0 to 170deg                                     |               |                |               |
| Polarization                             | 180deg  |               |                |               |
| Elevation                                | 0 to 90deg                                      |               |                |               |