

## **SA-9.0T**

### **9M Ring Focus Antenna, PERFORMANCE SPECIFICATIONS**

| SPECIFICATIONS                         | C-RECEIVE  | C-TRANSMIT    |
|--|--|---------------|
| Frequency(GHz)                         | 3.625~4.200  | 5.850~6.425   |
| Typical Gain (dBi)                     | 49.9   | 53.1          |
| VSWR                                   | 1.25 : 1   | 1.25 : 1      |
| Beamwidth(-3dB)                        | 0.55°  | 0.40°         |
| Beamwidth(-15dB)                       | 1.20°  | 0.80°         |
| G/T at 5° Elevation,4GHz with 30°K LNA | 30.8 db/°k   |               |
| Antenna Noise Temperature              | 4 Port Feed  |               |
| 10° Elevation                          | 40K  |               |
| 20° Elevation                          | 34K  |               |
| 30° Elevation                          | 30K  |               |
| Power Handing Capability               |  | 5000W / port  |
| Feed interface                         | CPR-229G   | CPR-159G/137G |
| Feed insertion loss                    | 0.20dB   | 0.20dB        |
| Port-port isolation                    |  |               |
| Tx-Rx                                  | 85dB   |               |
| Tx- Tx, Rx -Rx Linear                  | 30dB   | 30dB          |
| Cross Polarization isolation           | 35dB(on axis)  | 35dB(on axis) |
| Sidelobes                              | 29-25LOG(θ) dBi( $1^{\circ} \leq \theta \leq 20^{\circ}$ ) |               |
|  | -3.5 dBi( $20^{\circ} < \theta \leq 26.3^{\circ}$ )        |               |
|  | 32-25LOG(θ) dBi( $26.3^{\circ} < \theta \leq 48^{\circ}$ ) |               |
|  | -10(Average) dBi( $\theta > 48^{\circ}$ )                  |               |

### **MECHANICAL SPECIFICATIONS**

| SPECIFICATIONS                     | PARAMETERS               |
|------------------------------------|--------------------------|
| Azimuth Travel                     | ±90°                     |
| Elevation Travel                   | 0°~90°                   |
| Azimuth/Elevation Axis Drive Rates | 0.02°/s~0.04°/s          |
| Polarization Travel Rate           | 1°/s                     |
| Accuracy Servo System              | 1/8~1/10 Beamwidth(-3dB) |
| Installation Hardware              |                          |
| Shipping Weight                    | 11 tn.                   |
| Surface Accuracy                   | C-0.5mm                  |
| Finish                             | White paint              |

### ENVIRONMENTAL SPECIFICATIONS

| SPECIFICATIONS               | PARAMETERS                              |
|------------------------------|---|
| Operational Winds            | 45mi/h gusts to 60mi/h                  |
| Survival Winds(Any Position) | 125mi/h                                 |
| Ambient Temperature          | -30°C ~ 60°C                            |
| Relative Humidity            | 0% ~ 100%                               |
| Seism (Survival)             | 0.3 G's horizontal<br>0.15 G's vertical |
| Solar Radiation              | 360 BTU/h/ft <sup>2</sup>               |
| Ice thick                    | 3cm                                     |
| Atmospheric Conditions       | Salt、Pollutants                         |



## **SA-11.3T**

### **11.3M MODIFIED CASSEGRAIN ANTENNA PERFORMANCE SPECIFICATIONS**

| SPECIFICATIONS                         | C-RECEIVE   | C-TRANSMIT    |
|--|---|---------------|
| Frequency(GHz)                         | 3.625~4.200   | 5.850~6.425   |
| Typical Gain (dBi)                     | 51.9  | 55.5          |
| VSWR                                   | 1.25 : 1  | 1.25 : 1      |
| Beamwidth(-3dB)                        | 0.43°   | 0.28°         |
| Beamwidth(-15dB)                       | 0.86°   | 0.56°         |
| G/T at 5° Elevation,4GHz with 30°K LNA | 30.8db/k  |               |
| Antenna Noise Temperature              | 4 Port Feed   |               |
| 10° Elevation                          | 40K   |               |
| 20° Elevation                          | 34K   |               |
| 30° Elevation                          | 30K   |               |
| Power Handing Capability               |   | 5000W / port  |
| Feed interface                         | CPR-229G  | CPR-159G/137G |
| Feed insertion loss                    | 0.20dB  | 0.20dB        |
| Port-port isolation                    |   |               |
| Tx-Rx                                  | 85dB  |               |
| Tx- Tx, Rx -Rx Linear                  | 30dB  | 30dB          |
| Cross Polarization isolation           | 35dB(on axis)   | 35dB(on axis) |
| Sidelobes                              | 29-25LOG( $\theta$ ) dBi( $1^\circ \leq \theta \leq 20^\circ$ ) |               |
|  | -3.5 dBi( $20^\circ < \theta \leq 26.3^\circ$ )                 |               |
|  | 32-25LOG( $\theta$ ) dBi( $26.3^\circ < \theta \leq 48^\circ$ ) |               |
|  | -10(Average) dBi( $\theta > 48^\circ$ )                         |               |

### **MECHANICAL SPECIFICATIONS**

| SPECIFICATIONS                     | PARAMETERS               |
|------------------------------------|--------------------------|
| Azimuth Travel                     | ±90°                     |
| Elevation Travel                   | 0°~90°                   |
| Azimuth/Elevation Axis Drive Rates | 0.02°/s~0.04°/s          |
| Polarization Travel Rate           | 1°/s                     |
| Accuracy Servo System              | 1/8~1/10 Beamwidth(-3dB) |
| Installation Hardware              |                          |
| Shipping Weight                    | 16 tn.                   |
| Surface Accuracy                   | C-0.5mm                  |
| Finish                             | White paint              |

### **ENVIRONMENTAL SPECIFICATIONS**

| SPECIFICATIONS               | PARAMETERS                              |
|------------------------------|---|
| Operational Winds            | 45mi/h gusts to 60mi/h                  |
| Survival Winds(Any Position) | 125mi/h                                 |
| Ambient Temperature          | -30°C ~ 60°C                            |
| Relative Humidity            | 0% ~ 100%                               |
| Aeismic (Survival)           | 0.3 G's horizontal<br>0.15 G's vertical |
| Solar Radiation              | 360 BTU/h/ft <sup>2</sup>               |
| Ice thick                    | 3cm                                     |
| Atmospheric Conditions       | Salt、 Pollutants                        |

