



### Technical Specifications

| Electrical                   | Series 1304-1305 |               | Series 1344-1345 |               | Series 1374-1375  |               |
|------------------------------|------------------|---------------|------------------|---------------|-------------------|---------------|
|                              | C-Band           | Ku-Band       | C-Band           | Ku-Band       | C-Band            | Ku-Band       |
| Antenna Size                 | 3.0M (10 ft.)    |               | 3.4M (11 ft.)    |               | 3.7M (12 ft.)     |               |
| Operating Frequency (GHz)    | 3.625 - 4.2      | 10.95 - 12.75 | 3.625 - 4.2      | 10.95 - 12.75 | 3.625 - 4.2       | 10.95 - 12.75 |
| Midband Gain ( +/- .5dB)     | 40 dBi           | 49 dBi        | 40.2 dBi         | 49.8 dBi      | 40.9 dBi          | 50.7 dBi      |
| 3 dB Beamwidth               | 1.7°             | 0.6°          | 1.6°             | 0.53°         | 1.45°             | 0.5°          |
| Antenna Noise Temperature    |                  |               |                  |               |                   |               |
| 20° Elevation                | 30 K             | 29 K          | 29 K             | 28 K          | 25 K              | 23 K          |
| 30° Elevation                | 28 K             | 26 K          | 27 K             | 25 K          | 23 K              | 22 K          |
| Feed Interface               | CPR 229F         | WR 75         | CPR 229F         | WR 75         | CPR 229F          | WR 75         |
| First Sidelobe (typical)     | -20 dB           |               | -20 dB           |               | -20 dB            |               |
| Cross-Pol Isolation (Linear) | >30 dB (on axis) |               | >30 dB (on axis) |               | >30 dB (on axis)) |               |
| VSWR                         | 1.43:1 Max.      |               | 1.43:1 Max.      |               | 1.43:1 Max.       |               |
| Insertion Loss               | 0.2 dB Max       |               | 0.2 dB Max       |               | 0.2 dB Max.       |               |

#### Mechanical

|  |   |                       |                       |
|--|---|-----------------------|-----------------------|
| Reflector Material                                 | Eight Segment Glass Fiber Reinforced Polyester SMC          |                       |                       |
| Antenna Optics                                     | Prime Focus, Axisymmetric                                   |                       |                       |
| Mast Pipe Size                                     | 6" SCH 80 Pipe (6.62" OD) 16.83 cm.                         |                       |                       |
| Elevation Adjustment Range                         | 10° to 70° Continuous Fine Adjustment (90° optional)        |                       |                       |
| Azimuth Adjustment Range                           | 360° Continuous / Polar mount covers any 90° segment of arc |                       |                       |
| Declination Corrected Polar Range (1305/1345/1375) | 90° arc coverage with 36" actuator                          |                       |                       |
| f/D Ratio/Feed Support                             | .30/Quad Feed Support                                       | .36/Quad Feed Support | .37/Quad Feed Support |
| Shipping Specifications                            | 380 lbs. (173 kg.)  | 520 lbs. ( 234 kg.)   | 575 lbs. (259 kg.)    |

#### Environmental Performance

|                        |                         |  |
|------------------------|-------------------------|--|
| Wind Loading           | Operational<br>Survival | 45 mph (72 km/h)<br>125 mph (201 km/h)   |
| Temperature            | Operational<br>Survival | -40° to 140° F (-40° to 60° C)<br>-50° to 160° F (-46° to 71° C)                 |
| Rain                   | Operational             | 1/2" per hour  |
| Ice                    |                         | -----  |
| Atmospheric Conditions |                         | Salt, Pollutants and Contaminants as Encountered in Coastal and Industrial Areas |
| Solar Radiation        |                         | 360 BTU/h/ft2  |