

# 3.0, 3.4 & 3.7M C or Ku-Band

| 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 ( +/- .2dB)    | 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°          |
| Feed Interface              | CPR 229F         | WR 75         | CPR 229F         | WR 75         | CPR 229F         | WR 75         |
| First Sidelobe (typical)    | -20 dB           |               | -20 dB           |               | -20 dB           |               |
| 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          |
| Cross Polarization (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                                       | .30/Quad Feed Support | .30/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  |