Type 180: 1.8m Receive-Only Antenna System

The Skyware Global 1.8 m Type 180 Offset Antenna is a rugged commercial grade product suitable for the most demanding applications. The reflector is thermoset-molded for strength and surface accuracy. Molded into the rear of the reflector is a network of support ribs which not only strengthens the antenna, but also helps to sustain its critical parabolic shape.

The Az/El mount is constructed from heavy-gauge steel to provide a rigid support to the reflector. The Az/El mount secures the antenna to any 114 mm (4.50”) O.D. mast and prevents slippage in high winds.

A specially formulated powder paint process offers excellent protection from weather-related corrosion.

- All materials comply with EU directive No. 2002/95/EC (RoHS).
- One-piece thermoset-molded offset reflector.
- Single bolt fine elevation adjustment.
- Fine azimuth adjustment.
- Galvanized 19 mm (.75”) O.D. feed support legs.
- Factory pre-assembled mount.
- Plated hardware for maximum corrosion resistance.
- Hot dip galvanized Az/El mount.
- Available with a wide variety of C-band or Ku-band feeds.
### RF Performance

<table>
<thead>
<tr>
<th></th>
<th>C-band</th>
<th>Ku-band</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Aperture</td>
<td>1.8 m (71 in)</td>
<td>1.8 m (71 in)</td>
</tr>
<tr>
<td>Operating Frequency</td>
<td>3.7 - 4.2 GHz</td>
<td>10.95 - 12.75 GHz</td>
</tr>
<tr>
<td>Polarization</td>
<td>Linear (Circular Optional)</td>
<td>Linear (Circular Optional)</td>
</tr>
<tr>
<td>Gain @ 3.95/11.95 GHz</td>
<td>35.3 dBi</td>
<td>45.5 dBi</td>
</tr>
<tr>
<td>3 dB Beamwidth</td>
<td>3.0˚</td>
<td>1.0˚</td>
</tr>
<tr>
<td>Antenna Noise Temperature @ 30˚ Elevation</td>
<td>36˚ K</td>
<td>31˚ K</td>
</tr>
<tr>
<td>VSWR*</td>
<td>1.4:1</td>
<td>1.3:1</td>
</tr>
<tr>
<td>Antenna Cross Polarization</td>
<td>30 dB on Axis (Linear)</td>
<td>30 dB on Axis (Linear)</td>
</tr>
<tr>
<td>Feed Interface</td>
<td>CPR-229</td>
<td>WR75 Flat Flange</td>
</tr>
</tbody>
</table>

(All specifications typical)

*Function of feed specifications

### Mechanical Performance

- **Reflector Material**: Glass Fiber Reinforced Polyester
- **Antenna Optics**: One-Piece Offset Feed Prime Focus
- **Mount Type**: Elevation over Azimuth
- **Elevation Adjustment Range**: 10˚ - 90˚ Continuous Fine Adjustment
- **Azimuth Adjustment Range**: 360˚ Continuous ± 10˚ Fine Adjustment
- **Mast Pipe Interface**: 114 mm (4.50 in) Diameter
- **Wind Loading**
  - Operational: 80 km/h (50 mph)
  - Survival: 200 km/h (125 mph)
- **Temperature**: -50˚C to 80˚C
- **Humidity**: 0 to 100% (Condensing)
- **Atmosphere**: Standard Hardware Meets 500 Hour Salt Spray Test Requirements (ASTM B-117)
- **Solar Radiation**: 360 BTU/h/ft²
- **Shock and Vibration**: As Encountered During Shipping and Handling