

SPD6-5.2

1.8 m | 6 ft Standard Performance Parabolic Reflector Antenna, Dual-polarized, 5.25-5.85GHz



General Specifications

| Antenna Type | Standard Performance Parabolic Reflector Antenna |
|---------------|--|
| Size, nominal | 6 ft 1.8 m |
| Polarization | Dual |

Electrical Specifications

| Operating Frequency Band | 5.25 - 5.85 GHz |
|-----------------------------------|-----------------|
| Half Power Beamwidth, Horizontal | 2.1 degrees |
| Half Power Beamwidth, Vertical | 2.1 degrees |
| Cross-Polarization Discrimination | 30 dB |
| Front to Back Ratio (F/B) | 46 dB |
| Gain, Low Frequency | 37.4 dBi |
| Gain, Mid Frequency | 37.9 dBi |
| Gain, High Frequency | 38.4 dBi |
| VSWR | 1.5:1 |
| Return Loss | -14 dB |

Mechanical Specifications

| Fine Elevation Adjustment | +/- 25 degrees |
|--|-----------------------|
| Mounting Pipe Diameter, Min | 4.5 inch 11.4 cm |
| Mounting Pipe Diameter, Max | 4.5 inch 11.4 cm |
| Net Weight | 95 lbs 42.8 kg |
| Wind Velocity Operational | 90 mph 145 km/h |
| Wind Velocity Survival Rating | 125 mph 201 km/h |
| Mechanical Configuration | SP6 |
| Avial Force (FA) | 1768 lbs 7865 N |
| Side Force (FS) | 98 lbs 436 N |
| Twisting Moment (MT) | 2270 ft-lbs 3077 Nm |
| Operating temperature range | -40 to +60 C |
| Max pressure, psig, (if waveguide interface) | 5 |

Regulatory Compliance

| FCC | undeclared |
|----------------|------------|
| ETSI | undeclared |
| RoHS-complaint | Yes |

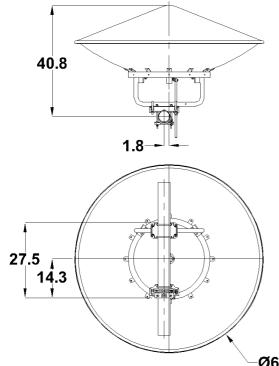
Shipping Information

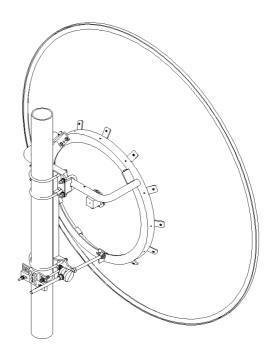
| Package Type | Wood Crate |
|-----------------------|-------------------------------------|
| Gross Weight | 222 lbs 100.7 kg |
| Dimensions, L x W x H | 77 x 20 x 80in 195 x 501 x 203 cm |
| Shipping Volume | 71.3 cu ft 2.02 cu m |

Additional Comments

Note that all 5.2 models will operate 4.9-6.0 GHz with slightly degraded specifications

Technical Drawings





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SP-6

Radiowaves Glossary

| Axial Force: | Force applied to the face of the antenna due to wind at specified wind speed |
|---|--|
| Beamwidth | The total width of the main beam measured in degrees between the 3-dB (half-power) points on either side of the peak of the main beam |
| Cross Polarization Discrimination (XPD) | The dB difference between maximum received co-polarized signal at electrical boresight and maximum received cross-polarized signal |
| Front to Back Ratio (F/B) | The dB difference between maximum received signal at electrical boresight to maximum received signal behind the antenna (180 +/- 40 degrees) |
| Gain | A measure of how well the antenna focuses available energy into a single beam. Larger antennas typically have higher gains and smaller beamwidths. |
| Gross Weight | Shipping weight, includes weight of antenna plus packaging materials |
| Net Weight | Weight of antenna only as mounted on tower. |
| Operating Frequency Band | The frequency limits between which the antenna meets declared specifications. Antennas may operate outside the frequency band with mild performance degradation. |
| Return Loss | A measure of how much rf energy incident upon the antenna is reflected back from whence it came, expressed as a negative dB value. |
| Side Force (FS) | Force applied to the side of the antenna due to wind at specified wind speed |
| Twisting Moment (MT) | The torsional (twisting) moment (force x distance) applied to the mounting pipe due to wind at the specified wind speed. |

| VSWR | A measure of how much rf energy incident upon the antenna is reflected back from whence it came, expressed as a ratio |
|-------------------------------|---|
| Wind Velocity Operational | Wind speed where the antenna deflection is less than or equal to 0.1 degrees |
| Wind Velocity Survival Rating | Wind speed where the antenna will not suffer permanent damage, but may require re- pointing. |