

SEC-3.5V-120-14

120 Degree, 14 dBi Sector Antenna, Vertical-polarized, 3.4-3.6GHz



General Specifications

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|---------------|--------------------|
| Antenna Type | Sector Antenna |
| Size, nominal | 2.125 ft 0.648 m |
| Polarization | Vertical |

Electrical Specifications

| | |
|----------------------------------|---------------|
| Operating Frequency Band | 3.4 - 3.6 GHz |
| Half Power Beamwidth, Horizontal | 120 degrees |
| Half Power Beamwidth, Vertical | 8 degrees |

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|-----------------------------------|----------|
| Cross-Polarization Discrimination | 25 dB |
| Front to Back Ratio (F/B) | 25 dB |
| Gain, Low Frequency | 13.7 dBi |
| Gain, Mid Frequency | 14 dBi |
| Gain, High Frequency | 14.2 dBi |
| VSWR | 1.5:1 |
| Return Loss | -14 dB |

Mechanical Specifications

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|--|------------------------------------|
| Fine Azimuth Adjustment | Supplied with coarse azadjust only |
| Fine Elevation Adjustment | +/- 5 degrees |
| Mounting Pipe Diameter, Min | 2 inch 5.1 cm |
| Mounting Pipe Diameter, Max | 4.5 inch 11.4 cm |
| Net Weight | 5 lbs 2.3 kg |
| Wind Velocity Operational | 90 mph 145 km/h |
| Wind Velocity Survival Rating | 125 mph 201 km/h |
| Mechanical Configuration | SEC1 |
| Axial Force (FA) | 85 lbs 378 N |
| Side Force (FS) | 32 lbs 142 N |
| Twisting Moment (MT) | 0 ft-lbs 0 Nm |
| Operating temperature range | -40 to +60 C |
| Max pressure, psig, (if waveguide interface) | na |

Regulatory Compliance

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

Shipping Information

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|--------------|-----------------|
| Package Type | Cardboard |
| Gross Weight | 13 lbs 5.9 kg |

Dimensions, LxWxH

12 x27 x8in | 30 x68 x20 cm

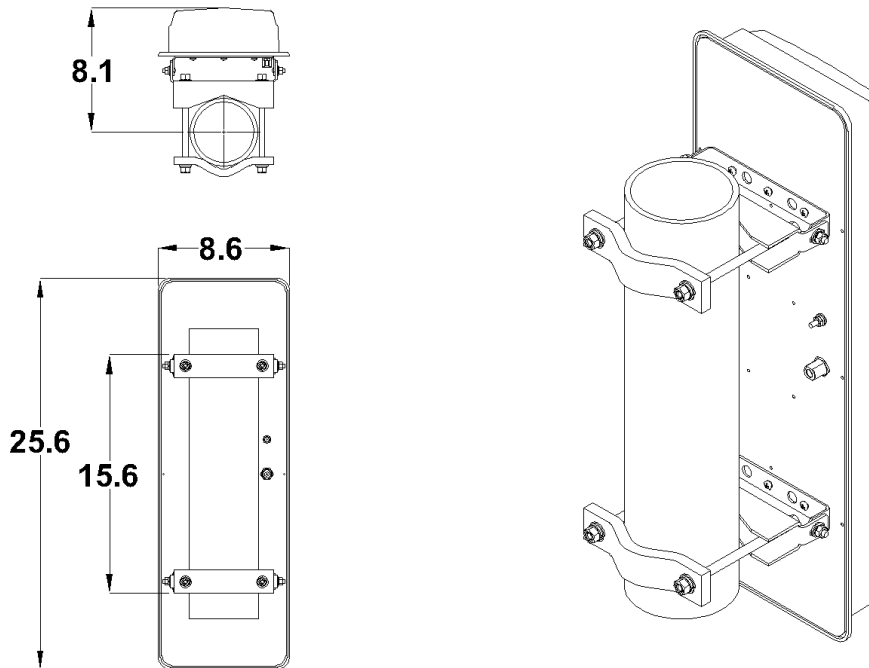
Shipping Volume

1.5 cu ft | 0.04 cu m

Additional Comments

STD-15-2 OPTIONAL DOWNTILT KIT. THESE SECTOR ANTENNAS WILL OPERATE OVER 3.60-3.65 GHz IF YOU WANT TO ASSURE A VSWR <1.5:1 OR BETTER, PLEASE STATE "TUNE FOR 3.60-3.65 GHz" ON YOUR PURCHASE ORDER.

Technical Drawings



SEC1

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. |