

0.6 m | 2 ft Standard Performance Parabolic Reflector Antenna, Single-polarized, 3.3-4.2 GHz

**SP2-3.5**



The SP Standard Performance 3.5GHz Series by RadioWaves offers a cost effective, single polarized, 2ft parabolic antenna engineered to deliver reliable radio links with a stable 24.6 dBi gain from 3.3 to 4.2 GHz. Designed for CBRS, C-band, private LTE, and world-wide CBRS applications, RadioWaves field proven preassembled SP antennas and robust pole mounts ensure “set and forget” installation with minimal post installation maintenance. If it’s rugged, it must be RadioWaves!

**FEATURES AND BENEFITS**

- Gain of up to 24.6 dBi with low VSWR and high port isolation across the entire 3.3-4.2 GHz band
- One 1x1 SISO antenna that covers CBRS, C-band, and world-wide 5G applications
- Fully powder-coated with rugged hardware built to survive the elements
- Optional Accessories:
  - Conical radome to reduce wind loading
  - Side-strut kits to improve wind survival and operability
- Rugged N-type Connector for horizontal or vertical polarization
- Reduced interference with 38 dB minimum front to back and suppressed side lobes
- Fully Preassembled at the Factory – Simplifies installation and guarantees “factory-tested” quality

**SPECIFICATIONS**

**General**

Antenna Type	Standard Performance Parabolic Reflector Antenna
Size, nominal	2 ft   0.6 m
Polarization	Single

Standard RF Connector Type	N-Female
Standard RF Connector Suffix	NS (append suffix to model number)

### Electrical

Operating Frequency Band	3.3 - 4.2 GHz
Half Power Beamwidth, Horizontal	10 degrees
Half Power Beamwidth, Vertical	10 degrees
Cross-Polarization Discrimination	28 dB
Front to Back Ratio (F/B)	32 dB

Gain, Low Frequency	23.8 dBi
Gain, Mid Frequency	24.6 dBi
Gain, High Frequency	25 dBi
VSWR	1.5:1
Return Loss	-14 dB

### Mechanical

Fine Azimuth Adjustment	+/- 10 degrees	
Fine Elevation Adjustment	+/- 30 degrees	
Mounting Pipe Diameter, Min	2 inch   5.08 cm	
Mounting Pipe Diameter, Max	4.5 inch   11.4 cm	
Net Weight	22 lbs   9.9 kg	26 lbs   11.7 Kg with RD radome
Wind Velocity Operational	90 mph   145 km/h	
Wind Velocity Survival Rating	125 mph   201 km/h	

Mechanical Configuration	SP2	
Axial Force (FA)	222 lbs   988 N	122 lbs   543 Nm with RD radome
Side Force (FS)	14 lbs   62 N	24 lbs   107 Nm with RD radome
Twisting Moment (MT)	225 ft-lbs   305 Nm	194 lbs   263 Nm with RD radome
Operating Temperature Range	-40 to +60 C	
Max Pressure, PSIG, (if waveguide interface)	na	

### Regulatory Compliance

FCC	undeclared
Industry Canada Compliance	undeclared

ETSI	undeclared
RoHS-compliant	Yes

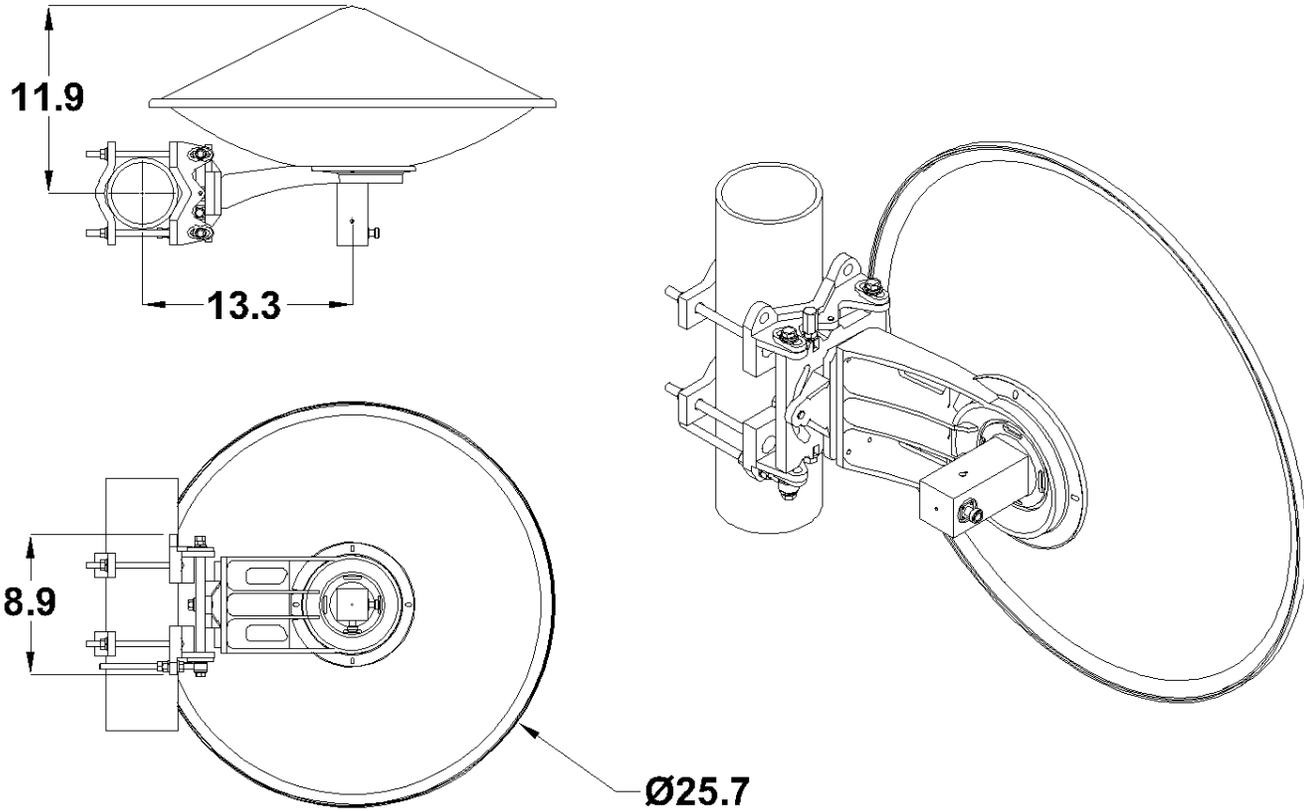
### Shipping Information

Package Type	Cardboard
Gross Weight	25 lbs   11.3 kg

Dimensions, L x W x H	28 x 8 x 28in   71 x 20 x 71 cm
Shipping Volume	3.63 cu ft   0.1 cu m

\*Additional OEM interfaces and adapters may be available. Contact RadioWaves for a complete and current list of available adapters.

TECHNICAL DRAWINGS



**SP2**