

1.2 m | 4 ft Standard Performance Parabolic Reflector Antenna, Single-polarized, 3.3-4.2GHz

SP4-3.5



The SP Standard Performance 3.5GHz Series by RadioWaves offers a cost effective, single polarized, 4ft parabolic antenna engineered to deliver reliable radio links with a stable 30.6 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 30.6 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	4 ft 1.2 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	5 degrees
Half Power Beamwidth, Vertical	5 degrees
Cross-Polarization Discrimination	30 dB
Front to Back Ratio (F/B)	38 dB

Gain, Low Frequency	29.8 dBi
Gain, Mid Frequency	30.6 dBi
Gain, High Frequency	30.7 dBi
VSWR	1.5:1
Return Loss	-14 dB

Mechanical

Fine Azimuth Adjustment	+/- 10 degrees	
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	60 lbs 27 kg	80 lbs 36 Kg with RD radome
Wind Velocity Operational	90 mph 145 km/h	
Wind Velocity Survival Rating	125 mph 201 km/h	

Mechanical Configuration	SP4	
Axial Force (FA)	855 lbs 3803 N	469 lbs 2087 Nm with RD radome
Side Force (FS)	45 lbs 200 N	93 lbs 414 Nm with RD radome
Twisting Moment (MT)	1120 ft-lbs 1518 Nm	784 lbs 1063 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	Wood Crate
Gross Weight	126 lbs 57.15 kg

Dimensions, L x W x H	59 x 19 x 60in 150 x 48 x 152 cm
Shipping Volume	38.92 cu ft 1.1 cu m

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

TECHNICAL DRAWINGS

