

0.9 m | 3 ft Standard Performance Parabolic Reflector Antenna, Single-polarized, 3.3-4.2GHz

SP3-3.5



The SP Standard Performance 3.5GHz Series by RadioWaves offers a cost effective, single polarized, 3ft parabolic antenna engineered to deliver reliable radio links with a stable 28.1 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 28.1 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	3 ft 0.9 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	8 degrees
Half Power Beamwidth, Vertical	8 degrees
Cross-Polarization Discrimination	30 dB
Front to Back Ratio (F/B)	34 dB

Gain, Low Frequency	27.3 dBi
Gain, Mid Frequency	28.1 dBi
Gain, High Frequency	28.2 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	35 lbs 15.8 kg	43 lbs 19.4 Kg with RD radome
Wind Velocity Operational	90 mph 145 km/h	
Wind Velocity Survival Rating	125 mph 201 km/h	

Mechanical Configuration	SP3	
Axial Force (FA)	492 lbs 2189 N	271 lbs 1206 Nm with RD radome
Side Force (FS)	40 lbs 178 N	64 lbs 285 Nm with RD radome
Twisting Moment (MT)	545 ft-lbs 739 Nm	394 lbs 534 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

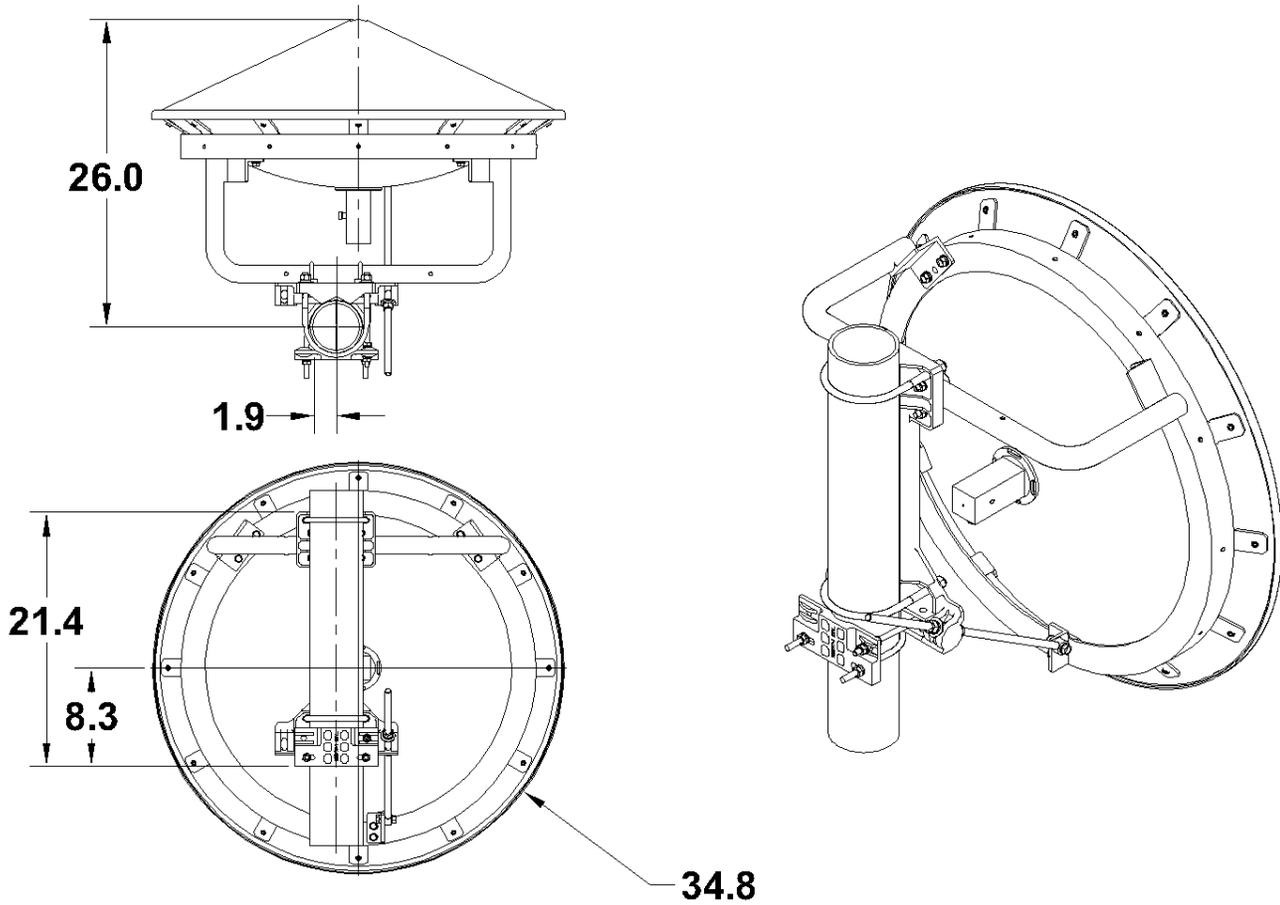
Shipping Information

Package Type	Wood Crate
Gross Weight	78 lbs 35.3 kg

Dimensions, L x W x H	40 x 17 x 44in 101 x 43 x 140 cm
Shipping Volume	17.31 cu ft 0.49 cu m

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

TECHNICAL DRAWINGS



SP3