

0.9M | 3 ft. Standard Performance Parabolic Reflector Antenna, Dual-polarized, 4.9-6GHz



SPD3-5W

The SP Standard Performance 5W Series by RadioWaves offers a cost effective, dual polarized, 3ft parabolic antenna engineered to deliver reliable radio links with a stable 33 dBi gain from 4.9 to 6 GHz.

Designed for U-NII-1, -2, -3, -4 and public safety applications, RadioWaves field-proven pre-assembled SP antennas and robust pole-mounts ensure “set and forget” installation with minimal post-installation maintenance. If it’s rugged, it must be RadioWaves!

[SP Wide Band Family Datasheet](#)

FEATURES AND BENEFITS

- Gain of up to 33 dBi with low VSWR and high port isolation across the entire 4.9-6 GHz band
- One antenna that covers the entire unlicensed 5 GHz U-NII-1, -2, -3, -4 and public safety bands
- Fully powder-coated with rugged hardware built to survive the elements
- Optional conical radome to reduce wind loading
- Dual N-type Connectors
- Reduced interference with 40 dB minimum front to back and suppressed side lobes
- Fully Preassembled at the Factory – Simplifies installation on site and guarantees “factory-tested” quality

SPECIFICATIONS

General

Antenna Type	Standard Performance Parabolic Reflector Antenna
Size, nominal	3 ft 0.9 m
Polarization	Dual

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

Electrical

Operating Frequency Band	4.9 - 6 GHz
Half Power Beamwidth, Horizontal	4.2 degrees
Half Power Beamwidth, Vertical	4.2 degrees
Cross-Polarization Discrimination	30 dB
Front to Back Ratio (F/B)	40 dB

Gain, Low Frequency	31.6 dBi
Gain, Mid Frequency	32.5 dBi
Gain, High Frequency	33 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 +60C	
Max Pressure, PSIG, (if waveguide interface)	5	

Regulatory Compliance

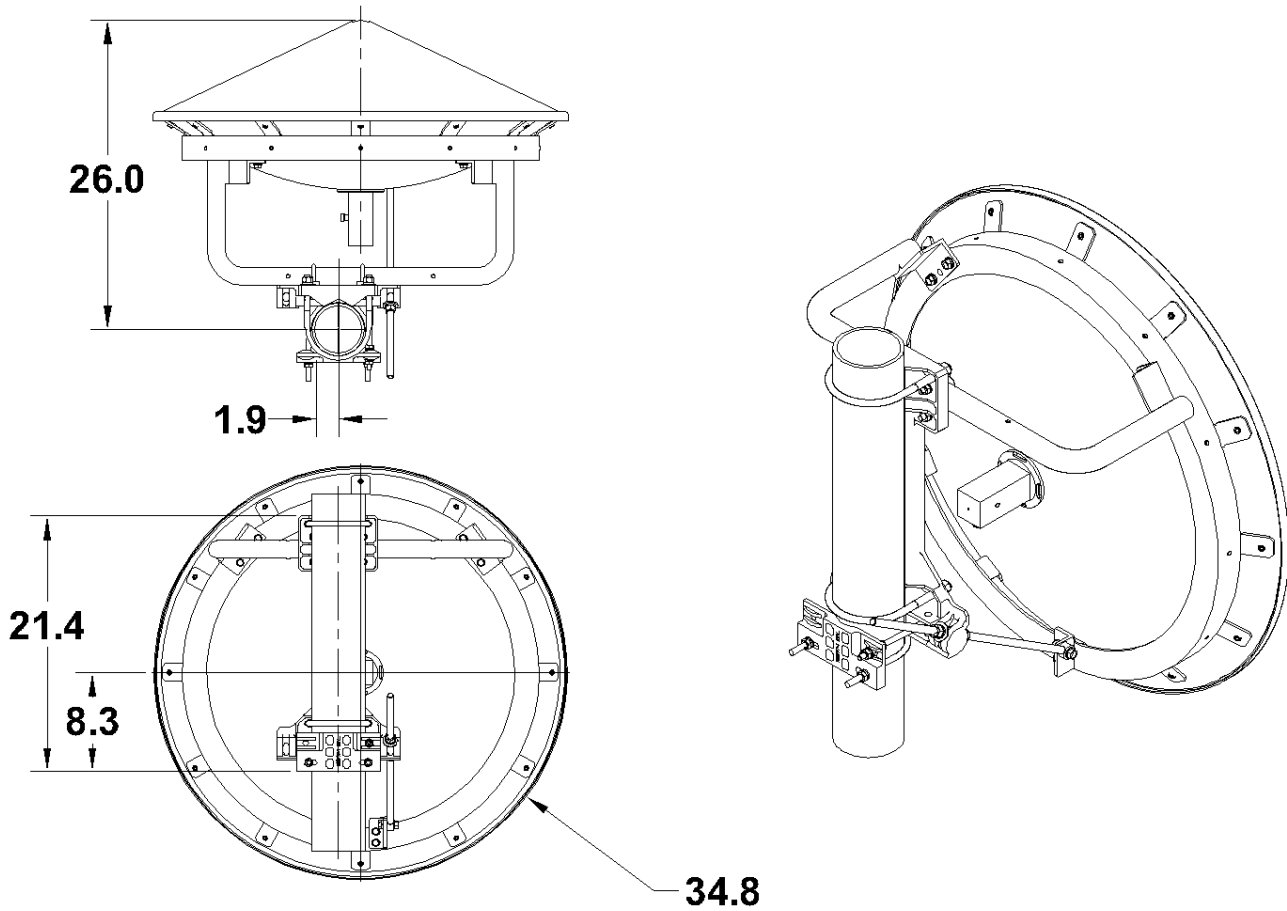
Industry Canada Compliance	undeclared
RoHS-compliant	Yes

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	17.3 cu ft 0.49 cu m

TECHNICAL DRAWINGS



SP3