

1.8M | 6 ft. Standard Performance Parabolic Reflector Antenna, Dual-polarized, 4.9-6GHz

SPD6-5W



The SP Standard Performance 5W Series by RadioWaves offers a cost effective, dual polarized, 6ft parabolic antenna engineered to deliver reliable radio links with a stable 38.4 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 38.4 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 46 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	6 ft 1.8 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	2.1 degrees
Half Power Beamwidth, Vertical	2.1 degrees
Cross-Polarization Discrimination	30 dB
Front to Back Ratio (F/B)	46 dB

Gain, Low Frequency	37 dBi
Gain, Mid Frequency	37.9 dBi
Gain, High Frequency	38.4 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	95 lbs 42.8 kg	125 lbs 56.3 Kg with RD radome
Wind Velocity Operational	90 mph 145 km/h	
Wind Velocity Survival Rating	125 mph 201 km/h	

Mechanical Configuration	SP6	
Axial Force (FA)	1768 lbs 7865 N	973 lbs 4329 Nm with RD radome
Side Force (FS)	98 lbs 436 N	162 lbs 721 Nm with RD radome
Twisting Moment (MT)	2270 ft-lbs 3077 Nm	2100 lbs 2847 Nm with RD radome
Operating Temperature Range	-40 to +60C	
Max Pressure, PSIG, (if waveguide interface)	5	

Regulatory Compliance

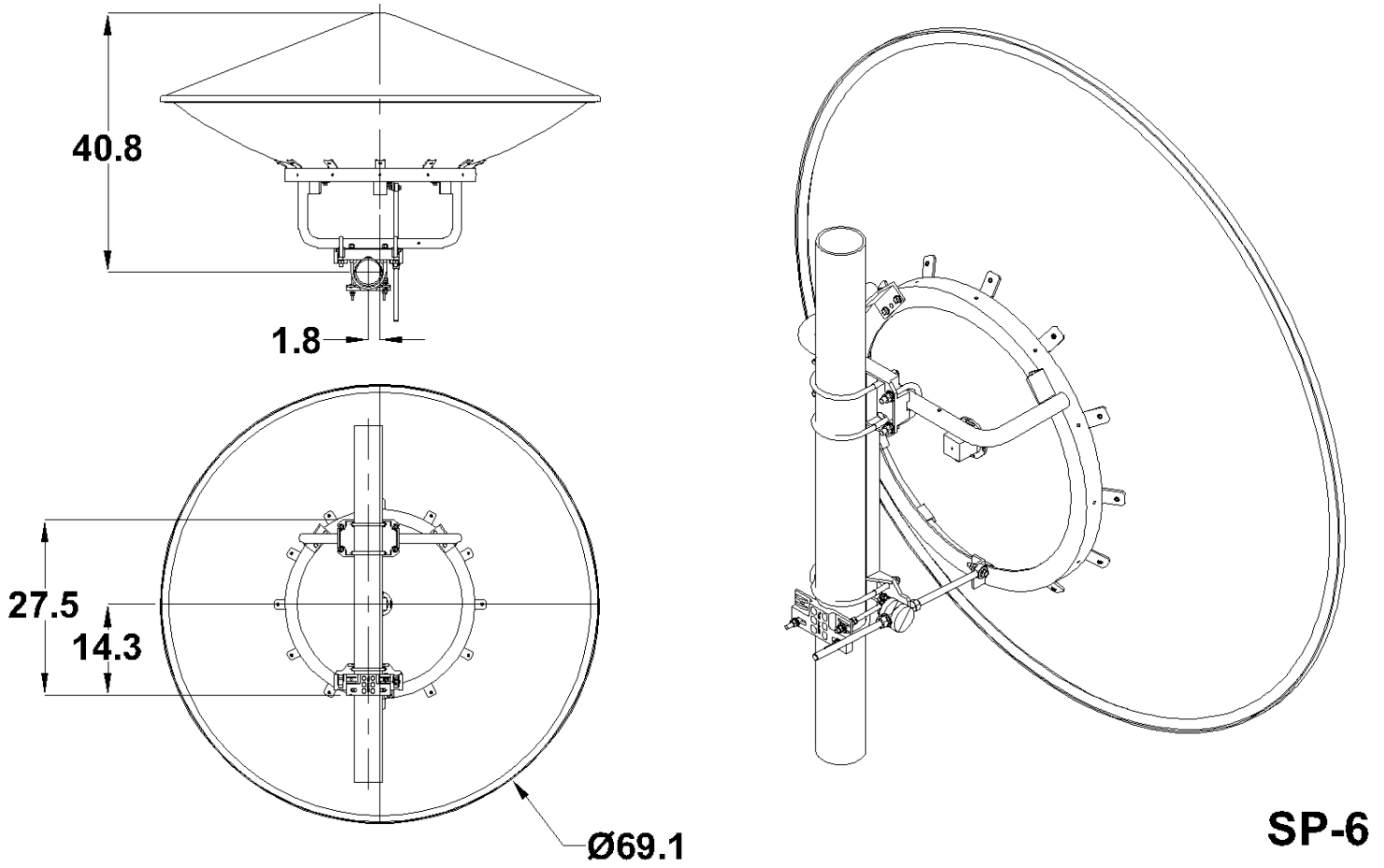
Industry Canada Compliance	undeclared
RoHS-compliant	Yes

Shipping Information

Package Type	Wood Crate
Gross Weight	222 lbs 100.7 kg

Dimensions, L x W x H	77 x 20 x 80in 195 x 501 x 203 cm
Shipping Volume	71.3 cu ft 2.02 cu m

TECHNICAL DRAWINGS



SP-6