

1.2 m | 4 ft Standard Performance Parabolic Reflector Antenna, Single-polarized, 12.7-13.25GHz

## SP4-13



The SP Standard Performance Series by RadioWaves offers a full line of cost effective standard performance parabolic antennas engineered to deliver reliable radio links. Designed for both unlicensed and licensed band 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!

### FEATURES AND BENEFITS

- Standard Performance Parabolic Antennas – Excellent performance for a wide range of licensed and unlicensed applications
- 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	4 ft   1.2 m
Polarization	Single

Standard RF Connector Type	WR75
Standard RF Connector Suffix	RS (append suffix to model number)

#### Electrical

Operating Frequency Band	12.7 - 13.25 GHz
Half Power Beamwidth, Horizontal	1.4 degrees
Half Power Beamwidth, Vertical	1.4 degrees
Cross-Polarization Discrimination	30 dB
Front to Back Ratio (F/B)	49 dB

Gain, Low Frequency	41.2 dBi
Gain, Mid Frequency	41.3 dBi
Gain, High Frequency	41.5 dBi
VSWR	1.37:1
Return Loss	-16.1 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)	5	

## Regulatory Compliance

FCC	Part 101 Cat. B
Industry Canada Compliance	SRSP312.7A

ETSI	302217 R1 C1
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

