

1.2 m | 4 ft Standard Performance Parabolic Reflector
Antenna, Single-polarized, 10.15-10.7GHz

SP4-10



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	CPR90G
Standard RF Connector Suffix	RS (append suffix to model number)

Electrical

Operating Frequency Band	10.15 - 10.7 GHz
Half Power Beamwidth, Horizontal	1.9 degrees
Half Power Beamwidth, Vertical	1.9 degrees
Cross-Polarization Discrimination	30 dB
Front to Back Ratio (F/B)	46 dB

Gain, Low Frequency	40.2 dBi
Gain, Mid Frequency	40.3 dBi
Gain, High Frequency	40.4 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	SRSP310.6

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

