

## THE LEADER IN MICROWAVE ANTENNA INNOVATION

 $0.3~\mathrm{m}$  | 1 ft Standard Performance Parabolic Reflector Antenna, Dual-polarized, 2.4-2.5GHz and 5.725-5.85 GHz

### **SP1-2/5**



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 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**

O Standard Performance Parabolic Antennas – Excellent performance for a wide range of licensed and unlicensed applications O 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	1 ft   0.3 m
Polarization	Dual

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

### **Electrical**

Operating Frequency Band	2.4 - 2.5 GHz	5.725 - 5.85 GHz
Half Power Beamwidth, Horizontal	28 degrees	11.8 degrees
Half Power Beamwidth, Vertical	28 degrees	11.8 degrees
Cross-Polarization Discrimination	17 dB	17 dB
Front to Back Ratio (F/B)	25 dB	30 dB

Gain, Low Frequency	13.8 dBi	23.2 dBi
Gain, Mid Frequency	14 dBi	23.3 dBi
Gain, High Frequency	14.2 dBi	23.4 dBi
VSWR	1.5:1	1.5:1
Return Loss	-14 dB	-14 dB



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## Mechanical

Fine Azimuth Adjustment	+/- 10 degrees	
Fine Elevation Adjustment	+/- 30 degrees	
Mounting Pipe Diameter, Min	2 inch   5.08 cm	
Mounting Pipe Diameter, Max	4.5 inch   11.4 cm	
Net Weight	15 lbs   6.8 kg	na lbs   0 Kg with RD radome
Wind Velocity Operational	90 mph   145 km/h	
Wind Velocity Survival Rating	125 mph   201 km/h	

Mechanical Configuration	SP1	
Axial Force (FA)	46 lbs   204 N	na lbs   na Nm with RD radome
Side Force (FS)	13 lbs   58 N	na lbs   na Nm with RD radome
Twisting Moment (MT)	27 ft-lbs   36 Nm	na lbs   na Nm with RD radome
Operating Temperature Range	-40 to +60 C	
Max Pressure, PSIG, (if waveguide interface)	na	

# **Regulatory Compliance**

FCC		undeclared
Industry Canada Co	ompliance	undeclared

ETSI	undeclared	
RoHS-compliant	Yes	

# **Shipping Information**

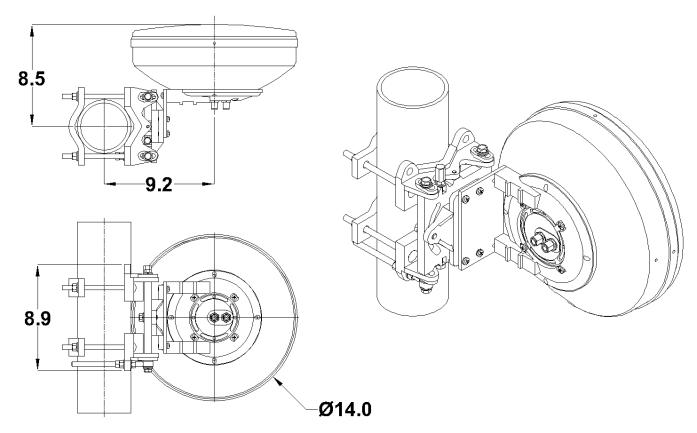
Package Type	Cardboard
Gross Weight	18 lbs   8.1 kg

Dimensions, L x W x H	16 x 16 x 10in   40 x 40 x 13 cm
Shipping Volume	1.48 cu ft   0.04 cu m

<sup>\*</sup>Additional OEM interfaces and adapters may be available. Contact RadioWaves for a complete and current list of available adapters.



## **TECHNICAL DRAWINGS**



SP1