

# 0.3 m | 1 ft Standard Performance Parabolic Reflector Antenna, Single-polarized, 4.4-5GHz

# SP1-4.7



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	Single

#### Electrical

Operating Frequency Band	4.4 - 5 GHz
Half Power Beamwidth, Horizontal	13.1 degrees
Half Power Beamwidth, Vertical	13.1 degrees
Cross-Polarization Discrimination	20 dB
Front to Back Ratio (F/B)	28 dB

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

Gain, Low Frequency	20.5 dBi
Gain, Mid Frequency	21.1 dBi
Gain, High Frequency	21.6 dBi
VSWR	1.5:1
Return Loss	-14 dB



## 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 Compliance	undeclared

ETSI	undeclared
RoHS-compliant	Yes

# **Shipping Information**

Package Type	Cardboard
Gross Weight	18 lbs   8.1 kg

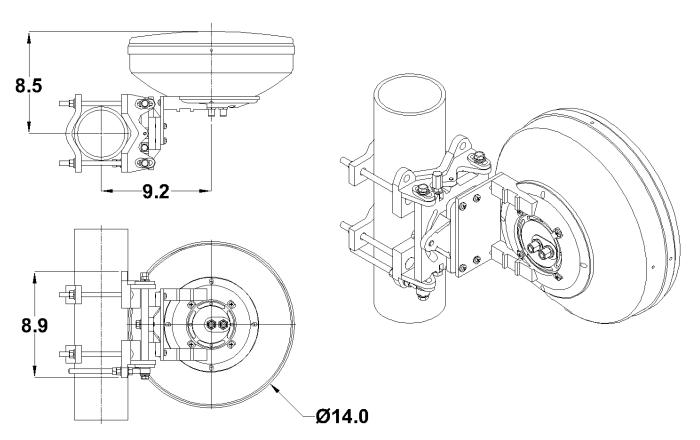
Dimensions, L x W x H	16 x 16 x 10in   40 x 40 x 13 cm
Shipping Volume	1.48 cu ft   0.04 cu m

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



# THE LEADER IN MICROWAVE ANTENNA INNOVATION

# **TECHNICAL DRAWINGS**



SP1

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