

SPD4-3.5

1.2 M | 4 FT STANDARD PERFORMANCE PARABOLIC REFLECTOR ANTENNA, DUAL-POLARIZED, 3.3-4.2GHZ

The SP Standard Performance 3.5GHz Series by RadioWaves offers a cost effective, dual polarized, 4ft parabolic antenna engineered to deliver reliable radio links with a stable 30.6 dBi gain from 3.3 to 4.2 GHz. Designed for CBRS, C-band, private LTE, and world-wide CBRS 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

- Gain of up to 30.6 dBi with low VSWR and high port isolation across the entire 3.3-4.2 GHz band
- One 2 x2 MIMO antenna that covers CBRS, C-band, and world-wide 5G applications
- Fully powder-coated with rugged hardware built to survive the elements
- Optional Accessories:
 - Conical radome to reduce wind loading
 - Side-strut kits to improve wind survival and operability
- Rugged Dual N-type Connectors for horizontal and vertical polarization
- Reduced interference with 38 dB minimum front to back and suppressed side lobes
- Fully Pre-assembled at the Factory – Simplifies installation and guarantees “factory-tested” quality

SPECIFICATIONS

General

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|---------------|--|
| Antenna Type | Standard Performance Parabolic Reflector Antenna |
| Size, nominal | 4 ft 1.2 m |
| Polarization | Dual |

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

Electrical

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| Operating Frequency Band | 3.3 - 4.2 GHz |
| Half Power Beamwidth, Horizontal | 5 degrees |
| Half Power Beamwidth, Vertical | 5 degrees |
| Cross-Polarization Discrimination | 30 dB |
| Front to Back Ratio (F/B) | 38 dB |

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| Gain, Low Frequency | 29.8 dBi |
| Gain, Mid Frequency | 30.5 dBi |
| Gain, High Frequency | 30.7 dBi |
| VSWR | 1.5:1 |
| Return Loss | -14 dB |

Mechanical

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| 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 | |

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| 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) | na | |

Regulatory Compliance

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|----------------------------|------------|
| FCC | undeclared |
| Industry Canada Compliance | undeclared |

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|----------------|------------|
| ETSI | undeclared |
| RoHS-compliant | Yes |

Shipping Information

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| Package Type | Wood Crate |
| Gross Weight | 126 lbs 57.15 kg |

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|-----------------------|------------------------------------|
| 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

