

# SPD2-5W

## 0.6M | 2 FT. STANDARD PERFORMANCE PARABOLIC REFLECTOR ANTENNA, DUAL-POLARIZED, 4.9-6GHZ

The SP Standard Performance 5W Series by RadioWaves offers a cost effective, dual polarized, 2ft parabolic antenna engineered to deliver reliable radio links with a stable 29.8 dBi gain from 4.9 to 6 GHz.

Designed for U-NII-1, -2, -3, -4 and public safety 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 29 dBi with low VSWR and high port isolation across the entire 4.9-6 GHz band
- One antenna that covers the entire unlicensed 5 GHz U-NII-1, -2, -3, -4 and public safety bands
- Fully powder-coated with rugged hardware built to survive the elements
- Optional conical radome to reduce wind loading
- Dual N-type Connectors
- Reduced interference with 38 dB minimum front to back and suppressed side lobes
- Fully Preassembled at the Factory – Simplifies installation on site and guarantees “factory-tested” quality
- Warranty – Industry leading 7-year warranty

### SPECIFICATIONS

#### General

|               |  |
|---------------|--|
| Antenna Type  | Standard Performance Parabolic Reflector Antenna |
| Size, nominal | 2 ft   0.6 m                                     |
| Polarization  | Dual   |

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

#### Electrical

|                                   |             |
|-----------------------------------|-------------|
| Operating Frequency Band          | 4.9 - 6 GHz |
| Half Power Beamwidth, Horizontal  | 6.2 degrees |
| Half Power Beamwidth, Vertical    | 6.2 degrees |
| Cross-Polarization Discrimination | 30 dB       |
| Front to Back Ratio (F/B)         | 38 dB       |

|                      |          |
|----------------------|----------|
| Gain, Low Frequency  | 28 dBi   |
| Gain, Mid Frequency  | 29 dBi   |
| Gain, High Frequency | 29.8 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                    | 22 lbs   9.9 kg    | 26 lbs   11.7 Kg with RD radome |
| Wind Velocity Operational     | 90 mph   145 km/h  |                                 |
| Wind Velocity Survival Rating | 125 mph   201 km/h |                                 |

|  |                     |                                 |
|--|---------------------|---------------------------------|
| Mechanical Configuration                     | SP2                 |                                 |
| Axial Force (FA)                             | 222 lbs   988 N     | 122 lbs   543 Nm with RD radome |
| Side Force (FS)                              | 14 lbs   62 N       | 24 lbs   107 Nm with RD radome  |
| Twisting Moment (MT)                         | 225 ft-lbs   305 Nm | 194 lbs   263 Nm with RD radome |
| Operating Temperature Range                  | -40 to +60C         |                                 |
| Max Pressure, PSIG, (if waveguide interface) | 5                   |                                 |

## Regulatory Compliance

|                            |            |
|----------------------------|------------|
| Industry Canada Compliance | undeclared |
| RoHS-compliant             | Yes        |

## Shipping Information

|              |                  |
|--------------|------------------|
| Package Type | Cardboard        |
| Gross Weight | 25 lbs   11.3 kg |

|                       |                                 |
|-----------------------|---------------------------------|
| Dimensions, L x W x H | 28 x 8 x 28in   71 x 20 x 71 cm |
| Shipping Volume       | 3.6 cu ft   0.1 cu m            |

TECHNICAL DRAWINGS

