

1.8 m | 6 ft Standard Performance Parabolic Reflector Antenna, Single-polarized, 7.125-7.75GHz

**SP6-7**



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 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 | 6 ft   1.8 m                                     |
| Polarization  | Single   |

|                              |                                    |
|------------------------------|------------------------------------|
| Standard RF Connector Type   | CPR112G                            |
| Standard RF Connector Suffix | RS (append suffix to model number) |

**Electrical**

|                                   |                  |
|-----------------------------------|------------------|
| Operating Frequency Band          | 7.125 - 7.75 GHz |
| Half Power Beamwidth, Horizontal  | 1.5 degrees      |
| Half Power Beamwidth, Vertical    | 1.5 degrees      |
| Cross-Polarization Discrimination | 30 dB            |
| Front to Back Ratio (F/B)         | 48 dB            |

|                      |          |
|----------------------|----------|
| Gain, Low Frequency  | 39.9 dBi |
| Gain, Mid Frequency  | 40.3 dBi |
| Gain, High Frequency | 40.7 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                    | 95 lbs   42.8 kg   | 125 lbs   56.3 Kg with RD radome |
| Wind Velocity Operational     | 90 mph   145 km/h  |                                  |
| Wind Velocity Survival Rating | 125 mph   201 km/h |                                  |

|  |                       |                                   |
|--|-----------------------|-----------------------------------|
| Mechanical Configuration                     | SP6                   |                                   |
| Axial Force (FA)                             | 1768 lbs   7865 N     | 973 lbs   4329 Nm with RD radome  |
| Side Force (FS)                              | 98 lbs   436 N        | 162 lbs   721 Nm with RD radome   |
| Twisting Moment (MT)                         | 2270 ft-lbs   3077 Nm | 2100 lbs   2847 Nm with RD radome |
| Operating Temperature Range                  | -40 to +60 C          |                                   |
| Max Pressure, PSIG, (if waveguide interface) | 5                     |                                   |

## Regulatory Compliance

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

|                |              |
|----------------|--------------|
| ETSI           | 302217 R1 C1 |
| RoHS-compliant | Yes          |

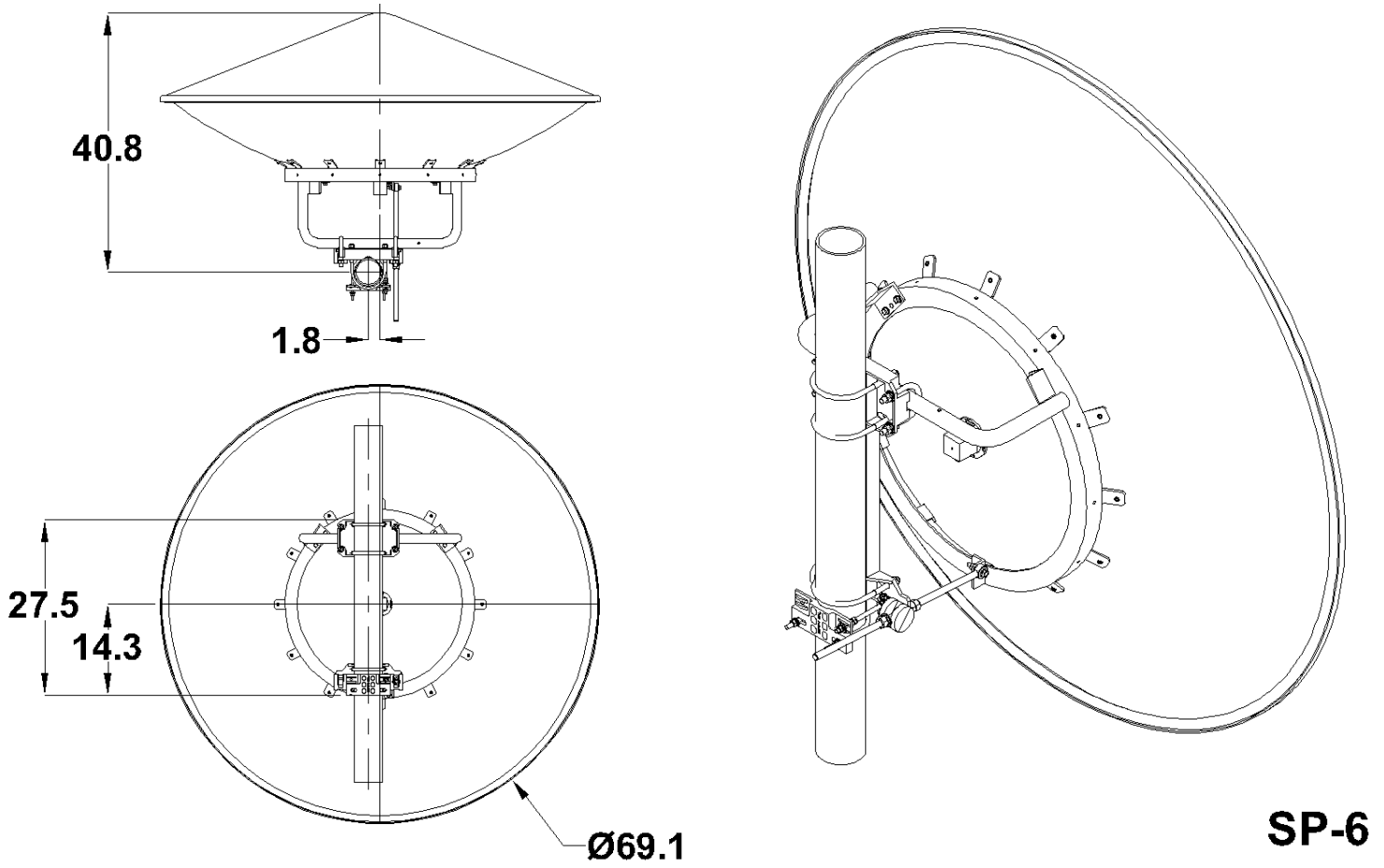
## Shipping Information

|              |                    |
|--------------|--------------------|
| Package Type | Wood Crate         |
| Gross Weight | 222 lbs   100.7 kg |

|                       |                                     |
|-----------------------|-------------------------------------|
| Dimensions, L x W x H | 77 x 20 x 80in   195 x 501 x 203 cm |
| Shipping Volume       | 71.3 cu ft   2.02 cu m              |

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

TECHNICAL DRAWINGS



**SP-6**