



5.25 - 5.85 GHz Standard Performance Dual Pole Parabolic Reflector Antenna

Standard Performance Dual Pole Parabolic Reflector Antennas from Cambium Networks are well suited for deployment with any of the sub-6 GHz PTP products. They are engineered to provide ETSI class 2/3 radiation pattern performance as well as excellent gain. Field-proven preassembled antennas and robust pole mounts ensure “set and forget” installation with minimal post installation maintenance.



FEATURES AND BENEFITS:

- 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
- Industry leading 7-year warranty
- Suitable for deployment with PTP 650, PTP 670, PTP 700 and PTP 450i connectorized radios.
- Fully supported in LINKPlanner™ providing accurate predictions of PTP link performance and availability. LINKPlanner™ is available at no charge from the support website at cambiumnetworks.com.
- Optional radomes available for reduced wind-loading.



SPECIFICATIONS

GENERAL

| | |
|----------------------------|--|
| Antenna Type | Standard Performance Parabolic Reflector Antenna |
| Size, nominal | 2 ft (0.6 m); 3 ft (0.9 m); 4 ft (1.2 m); 6 ft (1.8 m); 8 ft (2.4 m) |
| Polarization | Dual |
| Standard RF Connector Type | N-Female |

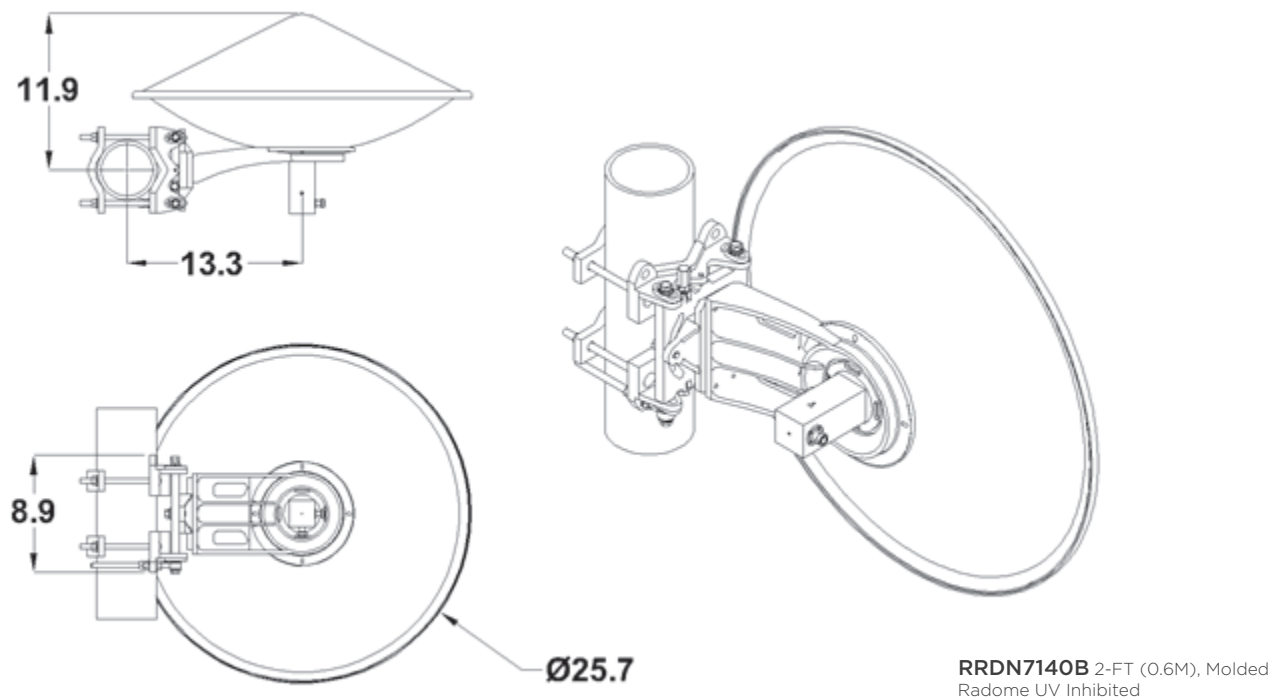
SPECIFICATIONS

| ELECTRICAL | 2 FT (0.6 M) | 3 FT (0.9 M) | 4 FT (1.2 M) | 6 FT (1.8 M) | 8 FT (2.4 M) |
|---|---|---|--|---|---|
| Model Number | RRDN7140B | RRDN7141B | RRDN7142B | RRDN7146B | RRDN7148B |
| Description | 2-FT (0.6M), Molded Radome UV Inhibited | 3-FT (0.9M), Molded Radome, UV Inhibited | 4-FT (1.2M), Molded Radome, UV Inhibited | 6-ft (1.8m), Molded Radome, UV Inhibited | 8-ft (2.4m), Molded Radome, UV Inhibited |
| Operating Frequency Band | 5.25 - 5.85 GHz | 5.25 - 5.85 GHz | 5.25 - 5.85 GHz | 5.25 - 5.85 GHz | 5.25 - 5.85 GHz |
| Half Power Beamwidth, Horizontal | 6.2 degrees | 4.2 degrees | 3.1 degrees | 2.1 degrees | 1.6 degrees |
| Half Power Beamwidth, Vertical | 6.2 degrees | 4.2 degrees | 3.1 degrees | 2.1 degrees | 1.6 degrees |
| Cross-PolarizationDiscrimination | 30 dB | 30 dB | 30 dB | 30 dB | 30 dB |
| Front to Back Ratio (F/B) | 38 dB | 40 dB | 44 dB | 46 dB | 52 dB |
| Gain, Low Frequency | 28.5 dBi | 32 dBi | 34.4 dBi | 37.4 dBi | 40.4 dBi |
| Gain, Mid Frequency | 29 dBi | 32.5 dBi | 34.9 dBi | 37.9 dBi | 40.9 dBi |
| Gain, High Frequency | 29.5 dBi | 33 dBi | 35.4 dBi | 38.4 dBi | 41.4 dBi |
| VSWR | 1.5:1 | 1.5:1 | 1.5:1 | 1.5:1 | 1.5:1 |
| Return Loss | -14 dB | -14 dB | -14 dB | -14 dB | -14 dB |
| MECHANICAL | 2 FT (0.6 M) | 3 FT (0.9 M) | 4 FT (1.2 M) | 6 FT (1.8 M) | 8 FT (2.4 M) |
| Fine Azimuth Adjustment | +/- 10 degrees | +/- 10 degrees | +/- 10 degrees | +/- 10 degrees | +/- 5 degrees |
| Fine Elevation Adjustment | +/- 30 degrees | +/- 25 degrees | +/- 25 degrees | +/- 25 degrees | +/- 5 degrees |
| Mounting Pipe Diameter, Min | 2 inch 5.08 cm | 4.5 inch 11.4 cm | 4.5 inch 11.4 cm | 4.5 inch 11.4 cm | 4.5 inch 11.4 cm |
| Mounting Pipe Diameter, Max | 4.5 inch 11.4 cm | 4.5 inch 11.4 cm | 4.5 inch 11.4 cm | 4.5 inch 11.4 cm | 4.5 inch 11.4 cm |
| Net Weight | 22 lbs 9.9 kg (26 lbs 11.7 Kg with RD radome) | 35 lbs 15.8 kg (43 lbs 19.4 Kg with RD radome) | 60 lbs 27 kg (80 lbs 36 Kg with RD Radome) | 95 lbs 42.8 kg (125 lbs 56.3 Kg with RD radome) | 165 lbs 74.3 kg (250 lbs 113.4 Kg with RD radome) |
| Wind Velocity Operational | 90 mph 145 km/h | 90 mph 145 km/h | 90 mph 145 km/h | 90 mph 145 km/h | 90 mph 145 km/h |
| Wind Velocity Survival Rating | 125 mph 201 km/h | 125 mph 201 km/h | 125 mph 201 km/h | 125 mph 201 km/h | 125 mph 201 km/h |
| Axial Force (FA) | 222 lbs 988 N (122 lbs 543 Nm with RD radome) | 492 lbs 2189 N (271 lbs 1206 Nm with RD radome) | 855 lbs 3803 N (469 lbs 2087 Nm with RD radome) | 1768 lbs 7865 N (973 lbs 4329 Nm with RD radome) | 3795 lbs 16940 N (2773 lbs 12334 Nm with RD radome) |
| Side Force (FS) | 14 lbs 62 N (24 lbs 107 Nm with RD radome) | 40 lbs 178 N (64 lbs 285 Nm with RD radome) | 45 lbs 200 N (93 lbs 414 Nm with RD radome) | 98 lbs 436 N (162 lbs 721 Nm with RD radome) | 1115 lbs 4980 N (1422 lbs 6325 Nm with RD radome) |
| Twisting Moment (MT) | 225 ft-lbs 305 Nm (194 lbs 263 Nm with RD radome) | 545 ft-lbs 739 Nm (394 lbs 534 Nm with RD radome) | 1120 ft-lbs 1518 Nm (784 lbs 1063 Nm with RD radome) | 2270 ft-lbs 3077 Nm (2100 lbs 2847 Nm with RD radome) | 4800 ft-lbs 6508 Nm (4400 lbs 5966 Nm with RD radome) |
| Operating Temperature Range | -40 to +60 C | -40 to +60 C | -40 to +60 C | -40 to +60 C | -40 to +60 C |
| Max Pressure, PSIG, (if waveguide interface) | 5 | 5 | 5 | 5 | 5 |
| REGULATORY COMPLIANCE | Yes | Yes | Yes | Yes | Yes |
| RoHS-compliant | Yes | Yes | Yes | Yes | Yes |
| SHIPPING INFORMATION | 2 FT (0.6 M) | 3 FT (0.9 M) | 4 FT (1.2 M) | 6 FT (1.8 M) | 8 FT (2.4 M) |
| Package Type | Cardboard | Wood Crate | Wood Crate | Wood Crate | Wood Crate |
| Gross Weight | 25 lbs 11.3 kg | 78 lbs 35.3 kg | 126 lbs 57.15 kg | 222 lbs 100.7 kg | 878 lbs 398.2 kg |
| Dimensions, L x W x H | 28 x 8 x 28in 71 x 20 x 71 cm | 40 x 17 x 44in 101 x 43 x 140 cm | 59 x 19 x 60in 150 x 48 x 152 cm | 77 x 20 x 80in 195 x 501 x 203cm | 102 x 60 x 91in 259 x 152 x 231cm |
| Shipping Volume | 3.63 cu ft 0.1 cu m | 17.31 cu ft 0.49 cu m | 38.92 cu ft 1.1 cu m | 71.3 cu ft 2.02 cu m | 322.29 cu ft 9.13 cu m |

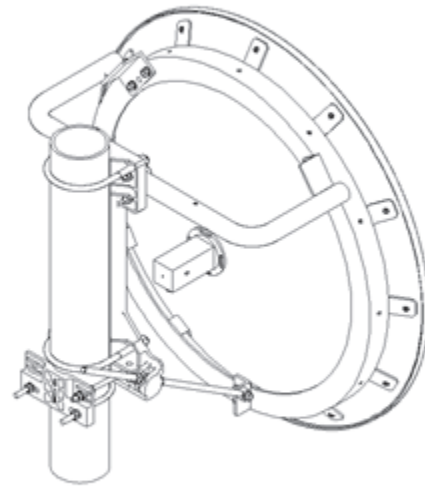
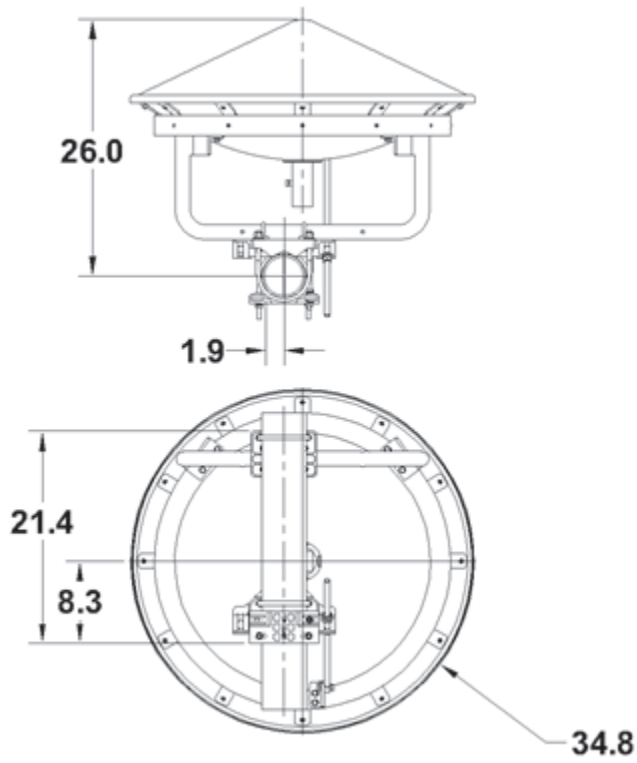
SPECIFICATIONS

| OPTIONAL RADOMES | 2 FT (0.6 M) | 3 FT (0.9 M) | 4 FT (1.2 M) | 6 FT (1.8 M) | 8 FT (2.4 M) |
|----------------------------------|--|---|---|---|---|
| Model Number | RRDN7140B | RRDN7141B | RRDN7142B | RRDN7146B | RRDN7148B |
| Description | 2-FT (0.6M), Molded Radome UV Inhibited | 3-FT (0.9M), Molded Radome, UV Inhibited | 4-FT (1.2M), Molded Radome, UV Inhibited | 6-ft (1.8m), Molded Radome, UV Inhibited | 8-ft (2.4m), Molded Radome, UV Inhibited |
| Attenuation, 2 GHz | 0.2 dB | 0.2 dB | 0.2 dB | 0.2 dB | 0.2 dB |
| Attenuation, 5 GHz | 0.4 dB | 0.4 dB | 0.4 dB | 0.4 dB | 0.4 dB |
| Attenuation, 7 GHz | 0.5 dB | 0.5 dB | 0.5 dB </td <td>0.5 dB</td> <td>0.5 dB</td> | 0.5 dB | 0.5 dB |
| Attenuation, 10 GHz | 0.6 dB | 0.6 dB | 0.6 dB | 0.6 dB | 0.6 dB |
| Attenuation, 13 GHz | 0.7 dB | 0.7 dB | 0.7 dB | 0.7 dB | 0.7 dB |
| Add to Antenna VSWR, Max, 2 GHz | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Add to Antenna VSWR, Max, 5 GHz | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Add to Antenna VSWR, Max, 7 GHz | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Add to Antenna VSWR, Max, 10 GHz | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Add to Antenna VSWR, Max, 13 GHz | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| Net Weight | 7 lbs 3.2 kg | 9 lbs 4 kg | 45 lbs 29.4 kg | 95 lbs 42.8 kg | 85 lbs 38.5 kg |
| Operating Temp. Range | -40 to +60 C | -40 to +60 C | -40 to +60 C | -40 to +60 C | -40 to +60 C |
| RoHS-compliant | Yes | Yes | Yes | Yes | Yes |
| Shipping Package Type | Cardboard | Cardboard | Wood Crate | Wood Crate | Wood Crate |
| Gross Shipping Weight | 8 lbs 3.6 kg | 9 lbs 4 kg | 51 lbs 25.1 kg | 142 lbs 64.4 kg | 432 lbs 195.9 kg |
| Shipping Dimensions L x W x H | 28 x 8 x 28in 71 x 20 x 71 cm | 37 x 37 x 13in 94 x 94 x 33 cm | 52 x 18 x 53in 132 x 45 x 135 cm | 77 x 20 x 80in 195 x 51 x 203 cm | 102 x 60 x 91in 259 x 152 x 231 cm |
| Shipping Volume | 3.6 cu ft 0.1 cu m | 10.3 cu ft 0.29 cu m | 28.7 cu ft 0.8 cu m | 71.3 cu ft 2.02 cu m | 322.3 cu ft 9.09 cu m |

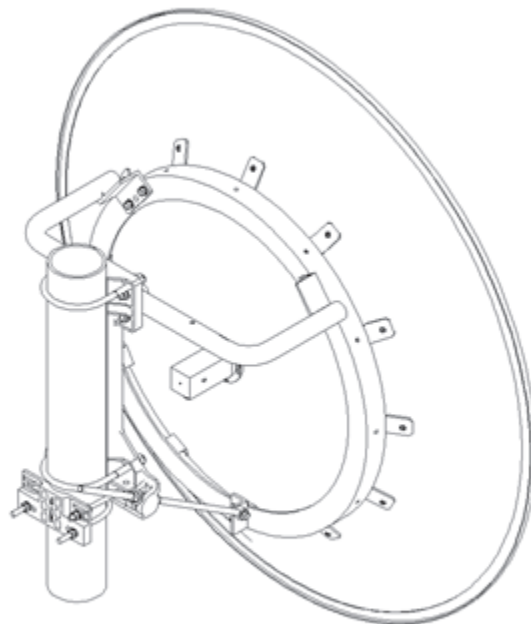
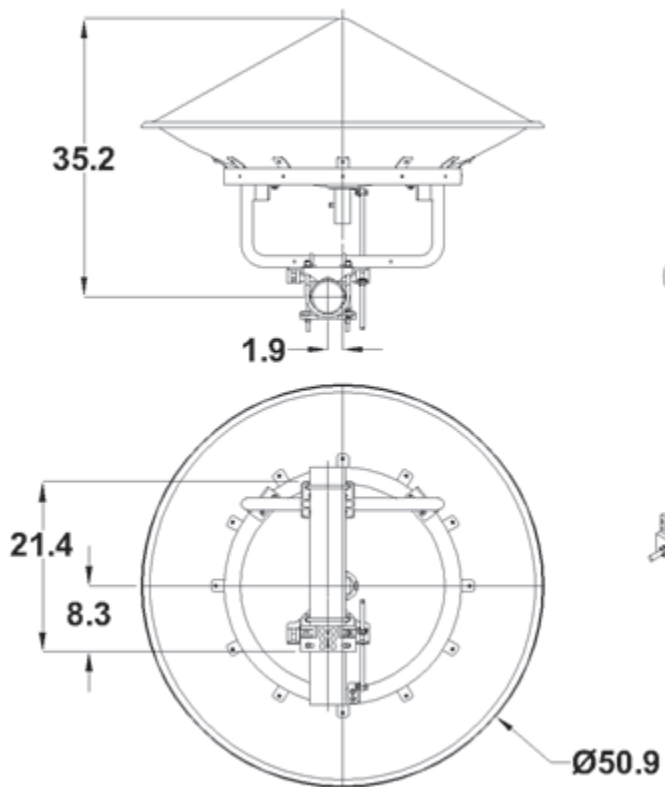
TECHNICAL DRAWINGS



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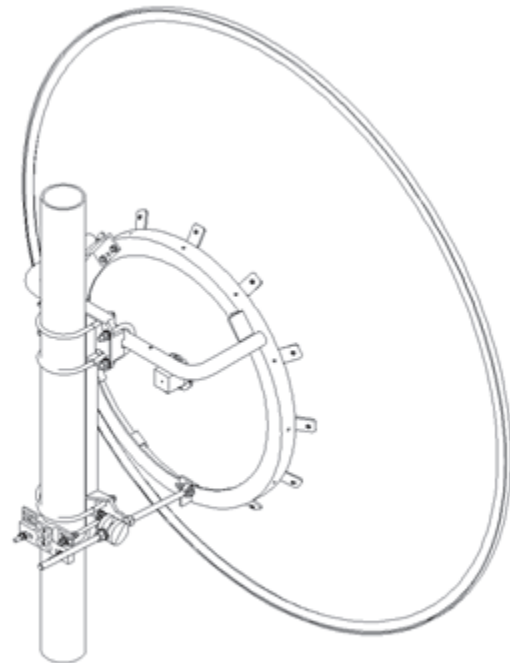
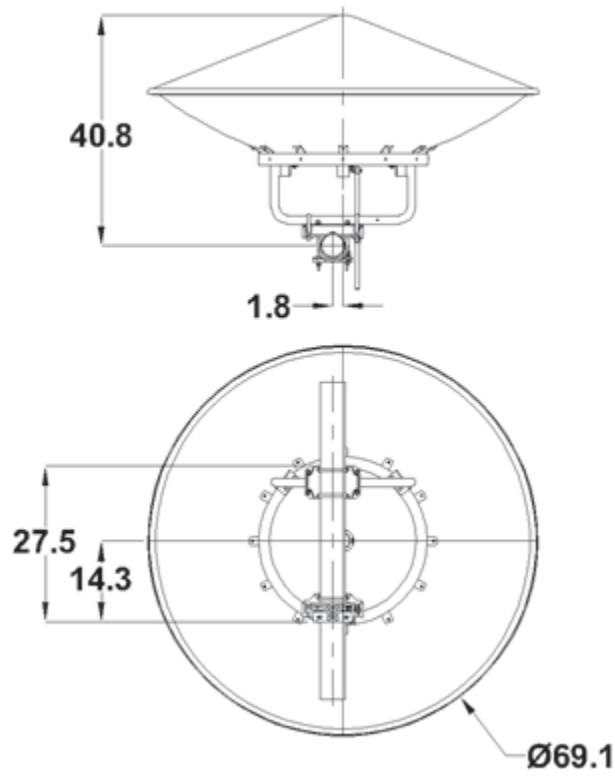


RRDN7141B 3-FT (0.9M), Molded Radome, UV Inhibited

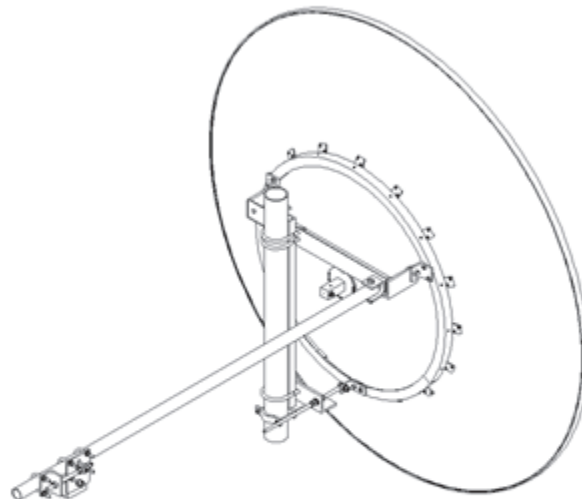
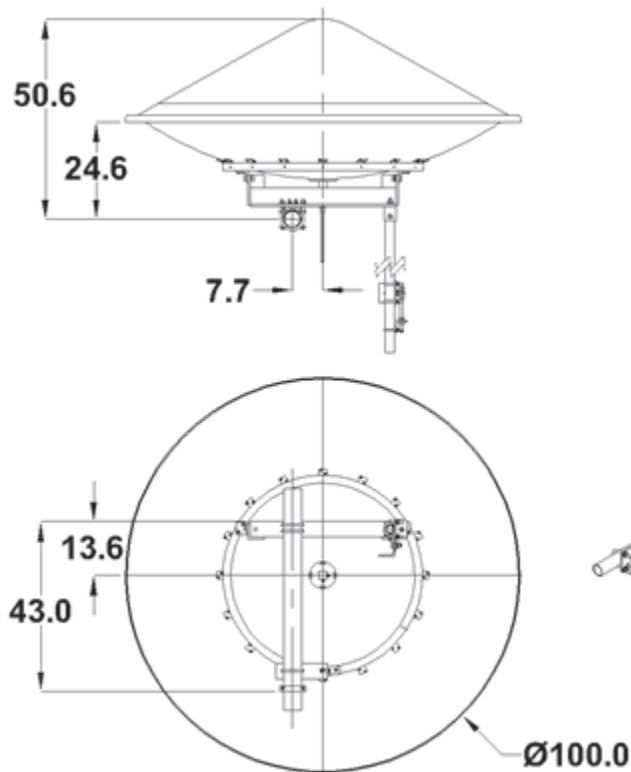


RRDN7142B 4-FT (1.2M), Molded Radome, UV Inhibited

TECHNICAL DRAWINGS



RRDN7146B 6-ft (1.8m), Molded Radome, UV Inhibited



RRDN7148B 8-ft (2.4m), Molded Radome, UV Inhibited