

# THE LEADER IN MICROWAVE ANTENNA INNOVATION

0.9 | 3 ft. High Performance Parabolic Reflector Antenna, Dual Polarized, 4.9-6GHz

### HPD3-5W



The HP High Performance 5W Series by RadioWaves offers a cost effective, dual polarized, 3 ft parabolic antenna engineered to deliver reliable radio links with a stable 32.8 dBi gain and enhanced protection from link interference over 4.9 to 6 GHz.

Designed for U-NII-1, -2, -3, -4 and public safety applications, RadioWaves field-proven pre-assembled HP antennas and robust polemounts 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 32.8 dBi with low VSWR and high port isolation across the entire 4.9-6 GHz band
- High Performance design offers reduced interference with 46 dB minimum front to back and suppressed side lobes
- 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
- Includes low-profile UV-protected radome
- Dual N-type Connectors
- Fully Preassembled at the Factory Simplifies installation on site and guarantees "factory-tested" quality

### **SPECIFICATIONS**

#### General

| Antenna Type  | High Performance Parabolic<br>Reflector Antenna |
|---------------|---|
| Size, nominal | 3 ft   0.9 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  | 4.2 degrees |
| Half Power Beamwidth, Vertical    | 4.2 degrees |
| Cross-Polarization Discrimination | 30 dB       |
| Front to Back Ratio (F/B)         | 46 dB       |

| Gain, Low Frequency  | 31.5 dBi |
|----------------------|----------|
| Gain, Mid Frequency  | 32.3 dBi |
| Gain, High Frequency | 32.8 dBi |
| VSWR                 | 1.5:1    |
| Return Loss          | -14 dB   |



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### **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                    | 76 lbs   34.47 kg  |
| Wind Velocity Operational     | 90 mph   145 km/h  |
| Wind Velocity Survival Rating | 125 mph   201 km/h |

| Mechanical Configuration                     | HP3-LoFreq          |
|--|---------------------|
| Axial Force (FA)                             | 403 lbs   1972 N    |
| Side Force (FS)                              | 200 lbs   890 N     |
| Twisting Moment (MT)                         | 344 ft-lbs   466 Nm |
| 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 | Wood Crate        |
|--------------|-------------------|
| Gross Weight | 143 lbs   69.8 kg |

| Dimensions, L x W x H | 47 x 28 x 48in   119 x 71 x 122 cm |
|-----------------------|------------------------------------|
| Shipping Volume       | 36.6 cu ft   1.04 cu m             |

Contact RadioWaves Sales for alternate RF interface options. RadioWaves specializes in direct connect solutions for microwave radios.





### **TECHNICAL DRAWINGS**

