

1.2 m | 4 ft High Performance Parabolic Reflector Antenna, Dual-polarized, 21.2-23.6GHz



HPD4-23

The HP High Performance Series by RadioWaves offers a full line of high performance parabolic antennas engineered to provide ETSI class 2/3 radiation pattern performance as well as excellent gain. RadioWaves field-proven pre-assembled antennas and robust pole-mounts ensure “set and forget” installation with minimal post-installation maintenance. The included radome ensures robust and reliable performance under the most challenging conditions. If it’s rugged, it must be RadioWaves!

FEATURES AND BENEFITS

- High Performance ETSI Class 2/3* Parabolic Antennas – Excellent performance for a wide range of applications
- Fully Preassembled at the Factory – Simplifies installation on site and guarantees “factory-tested” quality

*ETSI Class depends on frequency band

SPECIFICATIONS

General

Antenna Type	High Performance Parabolic Reflector Antenna
Size, nominal	4 ft 1.2 m
Polarization	Dual

Standard RF Connector Type	WR42
Standard RF Connector Suffix	RS (append suffix to model number)

Electrical

Operating Frequency Band	21.2 - 23.6 GHz
Half Power Beamwidth, Horizontal	0.8 degrees
Half Power Beamwidth, Vertical	0.8 degrees
Cross-Polarization Discrimination	30 dB
Front to Back Ratio (F/B)	72 dB

Gain, Low Frequency	45.4 dBi
Gain, Mid Frequency	46 dBi
Gain, High Frequency	46.4 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	85 lbs 38.3 kg
Wind Velocity Operational	90 mph 145 km/h
Wind Velocity Survival Rating	125 mph 201 km/h

Mechanical Configuration	HP4-LoFreq
Axial Force (FA)	737 lbs 3278 N
Side Force (FS)	365 lbs 1623 N
Twisting Moment (MT)	784 ft-lbs 1063 Nm
Operating Temperature Range	-40 to +60 C
Max Pressure, PSIG, (if waveguide interface)	5

Regulatory Compliance

FCC	Part 101 Cat. A
Industry Canada Compliance	SRSP23.8 A

ETSI	302217 R3 C3
RoHS-compliant	Yes

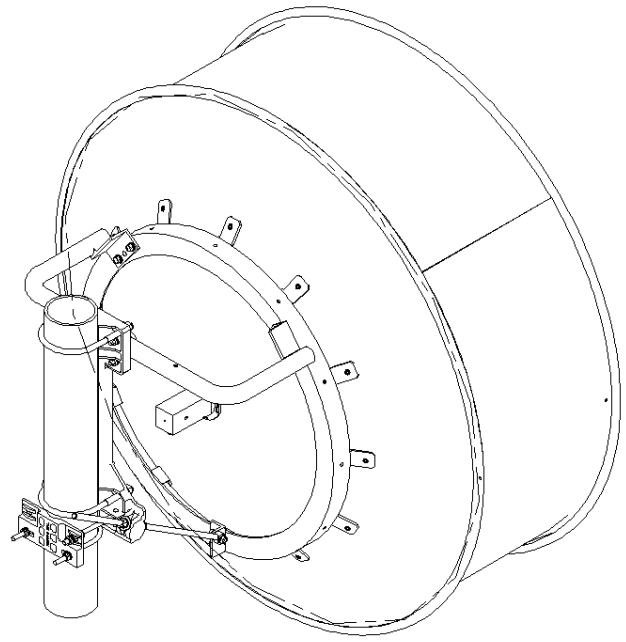
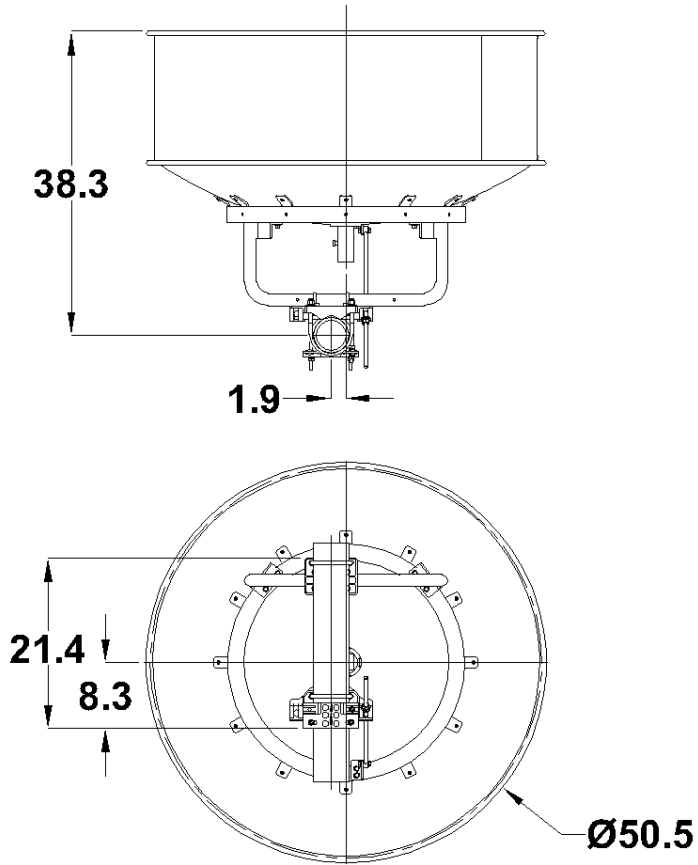
Shipping Information

Package Type	Wood Crate
Gross Weight	196 lbs 88.9 kg

Dimensions, L x W x H	59 x 35 x 60in 180 x 89 x 152 cm
Shipping Volume	71.7 cu ft 2.03 cu m

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

TECHNICAL DRAWINGS



HP4-LoFreq