

# THE LEADER IN MICROWAVE ANTENNA INNOVATION

0.3 m | 1 ft High Performance Parabolic Reflector Antenna, Single-polarized, 21.2-23.6GHz

### **HPLP1-23**



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 polemounts 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**

O High Performance ETSI Class 2/3\* Parabolic Antennas – Excellent performance for a wide range of applications O 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	1 ft   0.3 m
Polarization	Single

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	2.7 degrees
Half Power Beamwidth, Vertical	2.7 degrees
Cross-Polarization Discrimination	30 dB
Front to Back Ratio (F/B)	60 dB

Gain, Low Frequency	34.7 dBi
Gain, Mid Frequency	35.1 dBi
Gain, High Frequency	35.5 dBi
VSWR	1.37:1
Return Loss	-16.1 dB



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## **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	17 lbs   7.7 kg
Wind Velocity Operational	90 mph   145 km/h
Wind Velocity Survival Rating	125 mph   201 km/h

Mechanical Configuration	HPLP1
Axial Force (FA)	46 lbs   204 N
Side Force (FS)	13 lbs   28 N
Twisting Moment (MT)	27 ft-lbs   36 Nm
Operating Temperature Range	-40 to +60 C
Max Pressure, PSIG, (if waveguide interface)	5

# **Regulatory Compliance**

FCC	Part 101 Cat. B1
Industry Canada Compliance	SRSP23.8 B

ETSI	302217 R3 C3
RoHS-compliant	Yes

## **Shipping Information**

Package Type	Cardboard
Gross Weight	24 lbs   10.8 kg

Dimensions, L x W x H	18 x 18 x 19in   46 x 46 x 48 cm
Shipping Volume	3.56 cu ft   0.1 cu m

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





## **TECHNICAL DRAWINGS**

