

0.9 m | 3 ft High Performance Parabolic Reflector Antenna, Single-polarized, 17.7-19.7GHz



HP3-18

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	3 ft 0.9 m
Polarization	Single

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

Electrical

Operating Frequency Band	17.7 - 19.7 GHz
Half Power Beamwidth, Horizontal	1.3 degrees
Half Power Beamwidth, Vertical	1.3 degrees
Cross-Polarization Discrimination	30 dB
Front to Back Ratio (F/B)	69 dB

Gain, Low Frequency	42.7 dBi
Gain, Mid Frequency	43.5 dBi
Gain, High Frequency	43.7 dBi
VSWR	1.37:1
Return Loss	-16.1 dB

Mechanical

Fine Azimuth Adjustment	+/- 10 degrees
Fine Elevation Adjustment	+/- 10 degrees
Mounting Pipe Diameter, Min	2.5 inch 5.1 cm
Mounting Pipe Diameter, Max	4.5 inch 11.4 cm
Net Weight	50 lbs 12.3 kg
Wind Velocity Operational	90 mph 145 km/h
Wind Velocity Survival Rating	125 mph 201 km/h

Mechanical Configuration	HP3
Axial Force (FA)	403 lbs 1792 N
Side Force (FS)	200 lbs 890 N
Twisting Moment (MT)	344 ft-lbs 466 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	SRSP317.8 A

ETSI	302217 R2 C3
RoHS-compliant	Yes

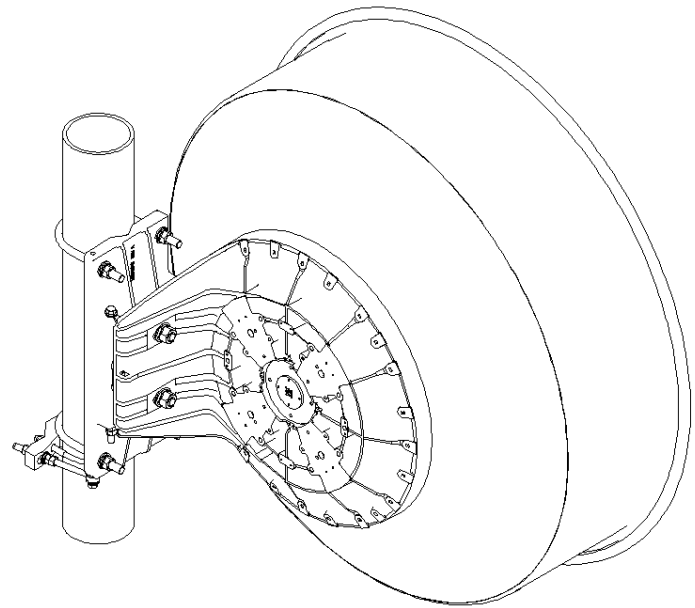
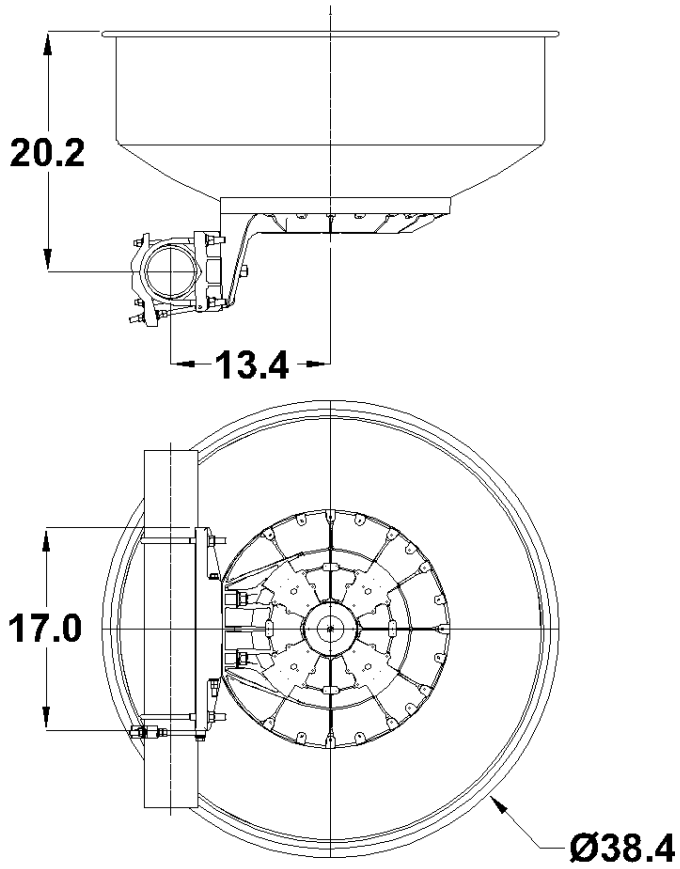
Shipping Information

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	36.56 cu ft 1.04 cu m

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

TECHNICAL DRAWINGS



HP3