

HPC1 (30 CM) SERIES

Parabolic Antenna

High Performance Commercial Line

RadioWaves line of High Performance Parabolic Antennas has expanded with the offering of the HPC Commercial Line. The HPC1 Series offers a value engineered high performance parabolic antenna within a 30 cm footprint. Designed for global applications, the HPC1 Series delivers a lightweight parabolic antenna with superior RF performance in frequency bands from 11 GHz to 38 GHz.



HPC1 (30 cm) Series

FEATURES

- Value priced for economical deployments
- Excellent RF performance
- Fully pre-assembled for “fastest time to tower”
- Compliant to ETSI and FCC standards
- Waveguide and direct mount interfaces available
- Wind ratings - 125 mph / minimum operating and 155 mph / survival
- HPC antennas available in 30, 60 and 90 cm options
- Lightweight 7.6 kg design
- Three year warranty

GENERAL SPECIFICATIONS HPC1 (30 CM) SERIES

Model	HPC1-11RS	HPC1-13RS	HPC1-18RS	HPC1-23RS	HPC1-38RS
Antenna Type	Parabolic	Parabolic	Parabolic	Parabolic	Parabolic
Size, Nominal	30 cm	30 cm	30 cm	30 cm	30 cm
Polarization	Single	Single	Single	Single	Single
Standard RF Connector Type	PBR120	PBR120	PBR220	PBR220	PBR320

ELECTRICAL SPECIFICATIONS

Operating Frequency Band	10.7 GHz - 11.7 GHz	12.745 GHz - 13.25 GHz	17.7 GHz - 19.7 GHz	21.2 GHz - 23.6 GHz	37.0 GHz - 40.0 GHz
Half Power Beamwidth, Horizontal	5.5°	4.7°	3.3°	3°	1.6°
Half Power Beamwidth, Vertical	5.5°	4.7°	3.3°	3°	1.6°
Cross-Polarization Discrimination	30 db	30 db	30 db	30 db	30 db
Front to Back Ratio (F/B)	54 db	57 db	60 db	62 db	61 db
Gain, Low Frequency	29.4 db	30.8 db	33.6 db	34.7 db	39.6 db
Gain, Mid Frequency	29.6 db	30.9 db	34.2 db	35.3 db	40.1 db
Gain, High Frequency	30 db	31 db	34.5 db	35.9 db	40.5 db
VSWR	≤1.3	≤1.3	≤1.3	≤1.3	≤1.3
Return Loss	≤-17.7 db	≤-17.7 db	≤-17.7 db	≤-17.7 db	≤-17.7 db

MECHANICAL SPECIFICATIONS

Model	HPC1-11RS, HPC1-13RS, HPC1-18RS, HPC1-23RS, HPC1-38RS
Fine Azimuth Adjustment	±15°
Fine Elevation Adjustment	±15°
Mounting Pipe Diameter, Min	Φ51 mm
Mounting Pipe Diameter, Max	Φ114 mm
Net Weight	5.5 kg
Wind Velocity Operational	125 mph
Wind Velocity Survival Rating	155 mph
Axial Force (FA)	90.2 lb
Side Force (FS)	45.1 lb
Twisting Moment (MT)	124 ft-lb
Operating Temperature Range	-45~ +60°C
Max Pressure, PSIG, (if waveguide interface)	10 PSIG

REGULATORY COMPLIANCE

Model	HPC1-11RS	HPC1-13RS	HPC1-18RS	HPC1-23RS	HPC1-38RS
FCC	NA	NA	US FCC Part 101B	US FCC Part 101A	US FCC Part 101A
ETSI	ETSI 302 217 Class 3	ETSI 302 217 Class 3	ETSI 302 217 Class 3	ETSI 302 217 Class 3	ETSI 302 217 Class 3
Industry Canada	NA	SRSP 312.7B	NA	SRSP-321.8B	SRSP-338.6
RoHS Compliant	Yes	Yes	Yes	Yes	Yes

SHIPPING INFORMATION

Model	HPC1-11RS, HPC1-13RS, HPC1-18RS, HPC1-23RS, HPC1-38RS
Package Type	Cardboard
Gross Weight	7.6 kg
Dimensions, L x W x H	50 cm x 45 cm x 32 cm
Shipping Volume	0.072 m ³

