



HPA ... 180 Series Antenna Specifications

	HPA 0.3 S 180 SR	HPA 0.4 S 180 FR	HPA 0.6 S 180 FR	HPA 0.8 S 180 FR	HPA 1.2 S 180 FR	HPA 1.5 S 180 FR	HPA 1.8 S 180 FR
Electrical Specification							
Operating Frequency	17.700–19.700 GHz						
Diameter	0.3 m	0.4 m	0.6 m	0.8 m	1.2 m	1.5 m	1.8 m
Gain mid-band	32.8 dBi	35.7 dBi	38.7 dBi	40.9 dBi	44.4 dBi	46.4 dBi	47.9 dBi
Polarization	Linear Simplex (Horizontal or Vertical)						
Half-Power Beamwidth	3.5°	2.6°	1.8°	1.4°	0.9°	0.7°	0.6°
Return Loss	–17.7 dB	–17.7 dB	–17.7 dB	–17.7 dB	–17.7 dB	–17.7 dB	–17.7 dB
Front-to-Back Ratio	60 dB	63 dB	66 dB	70 dB	72 dB	75 dB	76 dB
Cross-Polar Discrimination	30 dB	30 dB	32 dB	32 dB	32 dB	32 dB	32 dB
Flange ¹	Upon Customer's Request						
¹ Standard waveguide flange or any ODU interface is available upon request.							
Mechanical Specification							
Net Weight ²	10 kg	11 kg	14 kg	26 kg	48 kg	85 kg	146 kg
² Approximate weight (net weight depends on the required interface). Clamps, adjustment system (and side strut from 0.8 m diameter) are included.							
Antenna Pointing Range							
Azimuth _{fine}	±20°	±20°	±20°	±20°	±15°	±5°	±5°
Elevation _{fine}	±30°	±30°	±30°	±30°	±20°	±5°	±5°
Material and Finish							
Mount	Hot-Dip-Galvanized Steel						
Installation Hardware	Stainless Steel						
Feed	Aluminium						
Environmental Specification							
Operating Windspeed	120 km/h						
Survival Windspeed	220 km/h						
Ambient Temperature	±55°C						
ETSI Standard							
ETSI Range	2	2	2	2	2	2	2
ETSI Class	2	2	3	3	3	3	3



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Electrical Specification							
Operating Frequency	17.700–19.700 GHz						
Diameter	0.3 m	0.4 m	0.6 m	0.8 m	1.2 m	1.5 m	1.8 m
Gain mid-band	32.8 dBi	35.7 dBi	38.7 dBi	40.9 dBi	44.4 dBi	46.4 dBi	47.9 dBi
Polarization	Linear Duplex (Horizontal and Vertical)						
Half-Power Beamwidth	3.5°	2.6°	1.8°	1.4°	0.9°	0.7°	0.6°
Return Loss	-17.7 dB	-17.7 dB	-17.7 dB	-17.7 dB	-17.7 dB	-17.7 dB	-17.7 dB
Front-to-Back Ratio	60 dB	63 dB	66 dB	70 dB	72 dB	75 dB	76 dB
Cross-Polar Discrimination	30 dB	30 dB	32 dB	32 dB	32 dB	32 dB	32 dB
Flange ¹	Upon Customer's Request						
<small>¹ Circular waveguide with 12 mm diameter, or direct mounted Orthomode transducer with ODU interfaces and/or standard waveguide flanges. For more information about orthomode transducers please visit http://www.grante.hu/products/passives/OMT/index.html</small>							
Mechanical Specification							
Net Weight ²	10 kg	11 kg	14 kg	26 kg	48 kg	85 kg	146 kg
<small>² Approximate weight (net weight depends on the required interfaces). Clamps, adjustment system (and side strut from 0.8 m diameter) are included.</small>							
Antenna Pointing Range							
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