

1 - 1.6 GHz Four Horn Focussing 20 dBi HiRF Antenna Array fitted with a 7:16 DIN Connector

Catalogue number QPA-SL-1-1.6-A-20

Q-par reference QMS-00719

Contents Summary
Gain / Antenna Factor at One Metre
Beamwidth at One Metre
VSWR



Typical photograph with mounting trolley. Finish according to customer specifications.

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Typical Specification at One Metre

Frequency	1 to 1.6 GHz		
Connector Type	7:16 DIN		
Power Handling	2 kW c.w. 13 kW peak at 15 % duty cycle maximum.		
VSWR	Typically < 1.5 : 1. Maximum 2 : 1.		
Gain	18.9 to 20.6 dBi		
Antenna Factor	11.3 to 12.8 dB/m		
3dB Beamwidth	10 to 15 degrees		
Focus adjustment	Infinity to 950 mm.		
Weight	60 kg nominal		
Maximum Size	1250 x 1250 x 900 mm nominal		
Mounting	Requires specialised trolley. Refer to QMS-00719_ICD.		
Construction	Stainless steel, alumnium.		

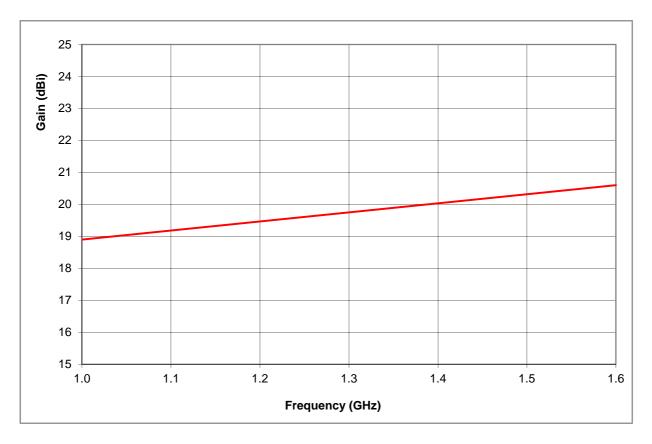
Antenna Gain / Factor at One Metre

This is calculated by reference to standard gain horn antennas with an estimated error of +/- 0.8dB. Horn squint setting nominal 12 degrees in horizontal and vertical planes.

Larger squint angles will increase the gain at the expense of beamwidth.

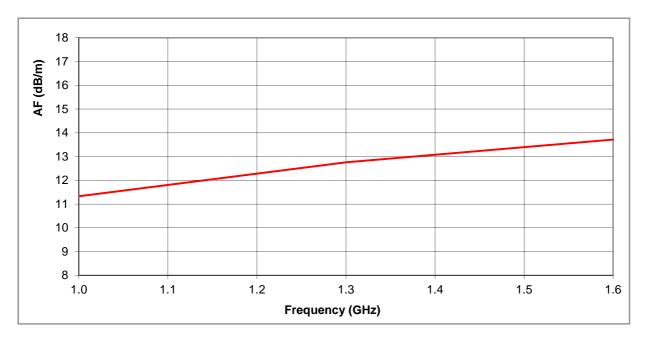
Gain and antenna factor are measured using a small, low gain probe such as a short dipole

One metre distance is with respect to the array centre, as measured from the end of the horns.





Antenna Factor at One Metre



Frequency	Gain at 1 m	Antenna factor at 1 m
GHz	dBi	dB/m
1	18.9	11.3
1.3	19.8	12.8
1.6	20.6	13.7

3dB Beamwidth at One Metre

Horn squint setting nominal 12 degrees in horizontal and vertical planes.

