

# 1.5 - 2.6 GHz Four Horn Focussing 21 dBi HiRF Antenna Array fitted with a 7:16 DIN Connector

Catalogue number QPA-SL-1.5-2.6-A-21

Q-par reference QMS-00722

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



 $\label{thm:condition} \mbox{Typical photograph with mounting trolley. } \mbox{Finish according to customer specifications}.$ 

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### **Typical Specification**

Frequency	1.5 to 2.6 GHz		
Connector Type	7:16 DIN		
Power Handling	1.4 kW c.w. 13 kW peak at 10 % duty cycle maximum.		
VSWR	Typically < 1.5 : 1. Maximum 2 : 1.		
Gain at 1 m	20.3 to 22 dBi		
Antenna Factor	13.5 to 14.5 dB/m		
3dB Beamwidth	8 to 14 degrees		
Focus adjustment	Infinity to 650 mm.		
Weight	54 kg nominal		
Maximum Size	950 x 950 x 900 mm nominal		
Mounting	Requires specialised trolley. Refer to QMS-00722_ICD.		
Construction	Stainless steel, alumnium.		

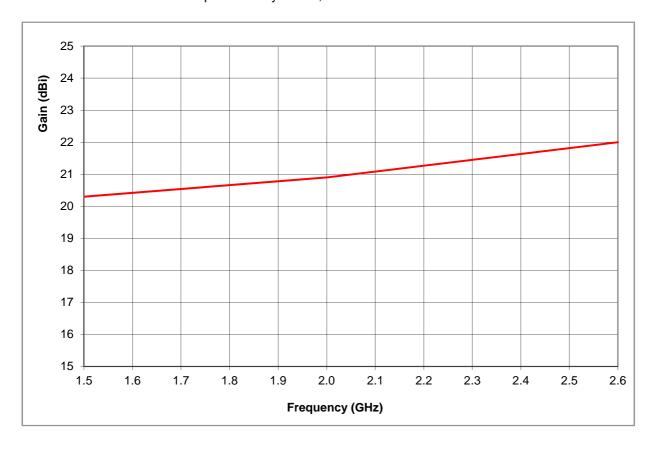
### Antenna Gain at One Metre

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, 103 on the scale.

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

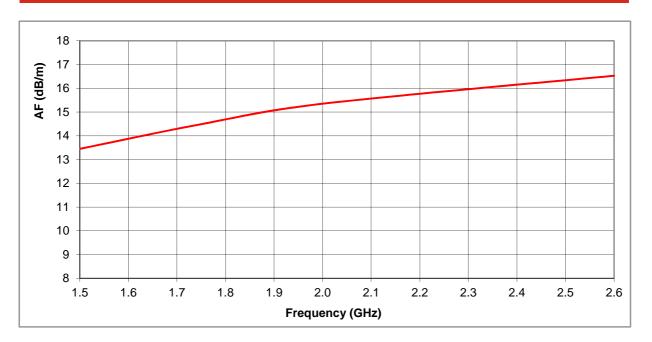
Gain and antenna factor are measured using a small, low gain probe such as a short dipole.

One metre distance is with respect to 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
1.5	20.4	13.45
2.0	20.9	15.35
2.6	22.0	16.53

## 3dB Beamwidth at One Metre

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

