

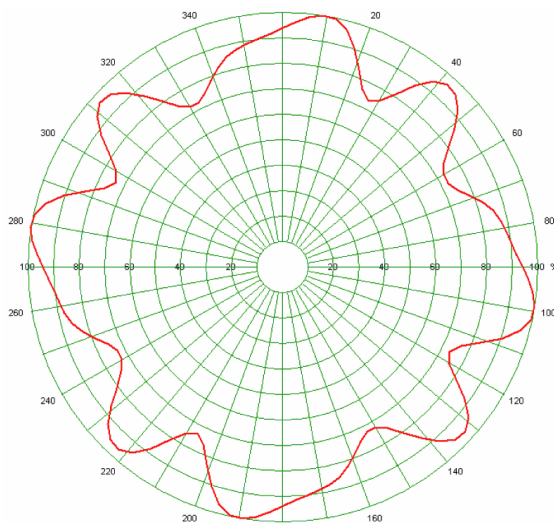
Antenna UHF TV 470-860MHz

Broadband Panel, H90 Horizontal Polarisation



Product Description

This antenna is designed to produce an omnidirectional Horizontal Radiation Pattern (HRP) when four panels are mounted around a square structure with a face width of 640mm, refer to the pattern below. The antenna is broadband over the whole UHF band 470-860MHz and suited to the transmission of several high power Digital or analogue channels. The panel is used as a basic building block to construct high gain antenna arrays.



Panel Specification			
Frequency Range	(MHz)	470-860	
Polarisation		Horizontal	
Power Rating - according to input connector			
	1 5/8" IEC	5kW @ 860MHz	
	7/8" IEC	1.8W @ 860MHz	
Electrical Length		2 wavelengths @ 565MHz	
Input Impedance	(ohms)	50	
Input VSWR		1.1:1	
Gain (relative to halfwave dipole)		10.9dB @ 470MHz	
		12.0dB @ 630MHz	
Lightning Protection		DC Grounded	
Construction		Passivated Aluminium screen	
		Brass Radiating elements, copper inner	
Ice Protection		GRP Radome	
Weight	(kg)	12	
Aerodynamic Area	Front	(m sq.)	0.55
	Side	(m sq.)	0.24
Dimensions	(mm)	1070 x 510 x 226	

In pursuance of continual product improvement, AlanDick reserve the right to change specifications without prior notice

Edition No: 1-03

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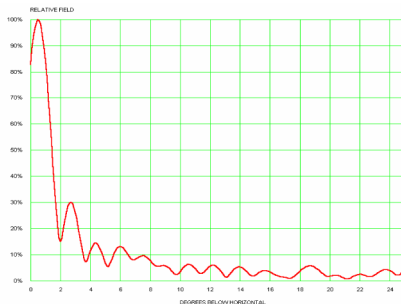
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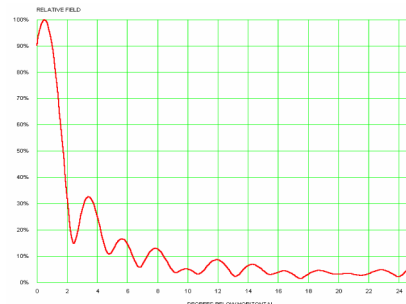


General Array Data						
No of Tiers	Aperture m	Intrinsic (vertical) gain dB			Weight Kg	Aerodynamic Area sq. m
		470MHz	630MHz	860MHz		
1	1.1	3.0	4.6	4.4		2.0
2	2.2	5.9	7.4	7.4		4.0
4	4.4	8.9	10.4	10.4	1,450	7.5
6	6.6	10.6	12.1	12.2	2,200	11.5
8	8.8	11.9	13.4	13.4	2,325	15
10	11	12.8	14.3	14.4	2,910	18.5
12	13.2	13.6	15.1	15.2	3,500	22.5
16	17.6	14.9	16.4	16.4	4,700	30

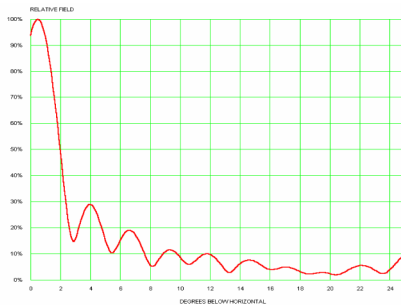
Typical Vertical Radiation Patterns (630MHz)



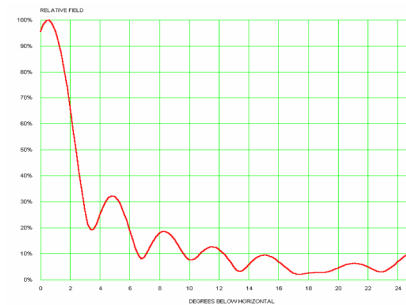
16 Tiers Null Fill Loss 0.5dB



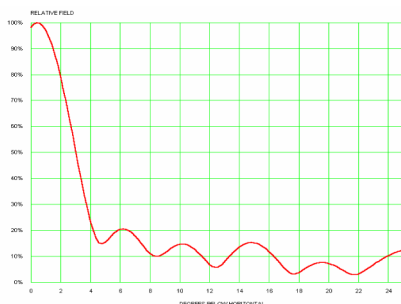
12 Tiers Null Fill Loss 0.51dB



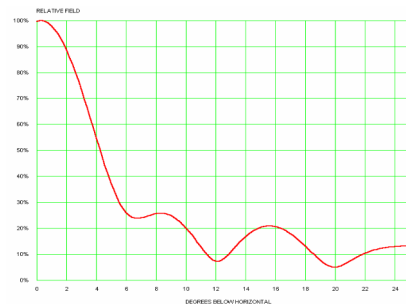
10 Tiers Null Fill Loss 0.43dB



8 Tiers Null Fill Loss 0.53dB



6 Tiers Null Fill Loss 0.37dB



4 Tiers Null Fill Loss 0.58dB

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