

VHF and UHF Interleaved Binary Array

IA404040-41-67-DIN

148-174 & 400-520MHz



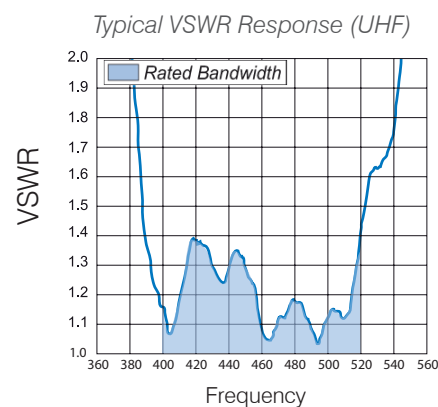
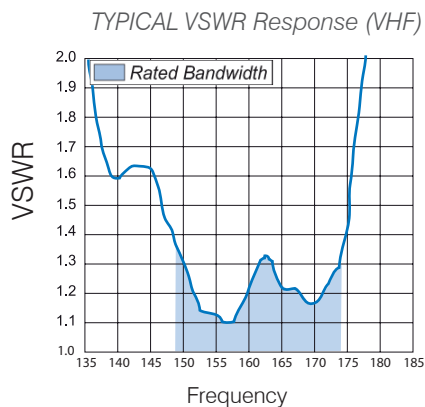
These high performance dual band Omni-directional dipole arrays provide a solution where site conditions prevent the use of multiple antennas. Depending on configuration, the array is a combination of 2 or 3 individual antennas on the one mast providing both VHF (148-174MHz) and UHF (400-520MHz) full band coverage. They allow the optimum use of available space whilst reducing wind and tower loadings

The VHF component is a 3dB gain omnidirectional antenna section, the UHF component provides flexibility and can be configured as 2 x 3dB gain omnidirectional antennas or these can be phased together to operate as a 6dB gain omnidirectional antenna.

Applications include dual band networks (i.e. UHF voice/ VHF paging) and communal radio sites accommodating both UHF and VHF services.

Features:

- Combines VHF and UHF bands on one single boom
- Operates over entire 148-174MHz and 400-520MHz bands
- DC grounded for optimal lightning protection
- Industry leading PIM ratings(-150dBc) providing low IM and low noise characteristics for optimum performance
- Dual UHF 2 x 3dBd as standard, optional external phasing harness(PHP42-67-DIN) creates 1 x 6dBd
- Optional 1M jumper to convert DIN to N type.
Part number F4A-PNFDM-1M, 7/16 DIN male to N female.



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Electrical Specifications	IA404040-41-67-DIN	
Nominal Gain <i>dBd</i> (<i>dBi</i>)	3 (5.1) at VHF	2 x 3 (5.1) at UHF*
Frequency <i>MHz</i>	148-174	400-520
Tuned Bandwidth <i>MHz</i>	26	120
VSWR	<1.5:1	
Polarisation	Vertical	
Nominal Impedance Ω	50	
H-Plane 3dB Beamwidth ^o	Omni +/-0.5	
E-Plane 3dB Beamwidth ^o	23	41
Input Power <i>Watts</i>	750	500
Passive IM 3rd order (2x20W) <i>dBc</i>	< -150	

Mechanical Specifications	IA404040-41-67-DIN	
Construction & Configuration	Fully welded Aluminium construction	
Length <i>inches</i>	165.4	
Boom Diameter <i>inches</i>	2.5	
Weight <i>lbs</i>	44.1	
Shipping Weight <i>lbs</i>	287	
Shipping Dimensions <i>inches</i>	H	25.7
	W	32.4
	L	180.3
Termination	7/16" DIN female on cable tail	
Mounting Area <i>inches</i>	30" x 2.5" diam. aluminium	
Suggested Clamps (<i>not included</i>)	UC1142	
Project Area <i>ft</i> ²	No Ice	7.1
	With Ice	12.5
Lateral thrust @ 100mph <i>lbs</i>	No Ice	175
	With Ice	309
Torque @ 100mph <i>ft - lbs</i>	No Ice	990
	With Ice	1747
Wind Gust Rating <i>mph</i>	No Ice	149
	With Ice	119

*The 2 x 3dBd UHF arrays may be phased together to provide a high gain 6dBd UHF array. Phasing harness sold separately.

