

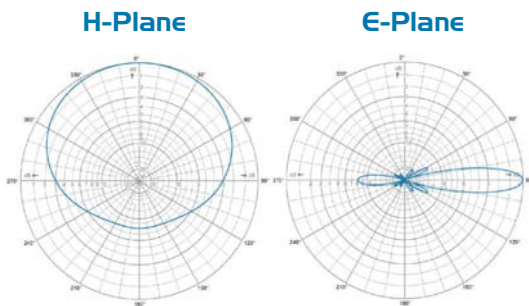
The S.M4 is an array of four dipoles mounted on an aluminium mast. Each folded dipole balun assembly and harness junction is completely encapsulated in epoxy resin, totally preventing moisture ingress. The balun assembly has been tested to BS5490:IP67. The S.M4 offset array is used extensively in UHF and VHF Trunking systems. The dipoles can be easily oriented on site or before shipment to adjust between omnidirectional and directional patterns, and beam tilt is easily achieved via the parallel feed. The VHF antenna disassembles to reduce shipping costs, and the boom can be supplied in two parts if requested.

Electrical & mechanical specifications



Frequency range	118 - 500 MHz	
Input impedance	50Ω	
Bandwidth	± 5.5% of Centre Frequency	
VSWR	<1.5:1	
Front to back ratio	7 dB (offset)	
Maximum input power	250 Watts	
Polarisation	Vertical	
Forward gain	Omni 5.7 dBd	Offset 8.7 dBd
3dB Beamwidth	E Plane 21°	
	H Plane 180° (offset)	
Standard connection	3m Length of RG213 c/w 'N' type socket	
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6	
Support boom	VHF 63.5mm dia. x 6.3mm wall aluminium alloy grade 6082T6	
	UHF 38.1mm dia. x 3.2mm wall aluminium alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Dipole clamps	Cast aluminium alloy	
Dipole adjustment	M8 Stainless steel screws	
Saddle clamps	Diecast zinc alloy	
Insulator	Epoxy resin encapsulant	
Lightning protection	Direct grounded	VHF Lightning finial
Mounting brackets	VHF to suit structure	UHF fit inside scaffold pole
Typical weight	VHF 26 kg	UHF 6 kg
Typical length	VHF 6 m	UHF 2.5 m
Typical wind loading @ 45m/s	VHF 620N	UHF 180N

Free space radiation patterns



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Mounting accessories

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2140/2141 Series
Galvanised steel parallel clamp up to 60/120mm
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UA66-22
Cast aluminium cross / parallel clamp 25-50mm

Standard stock models

Stock code	Frequency
S.M4-I27	117-137MHz
S.M4-I65	155-175MHz
S.M4-I84	176-192MHz
S.M4-200	192-208MHz
S.M4-405	380-430MHz
S.M4-445	420-470MHz