

# S.M2

## Two element stacked dipole array

### DESCRIPTION

- The S.M2 are an array of two centre fed folded dipoles mounted on an aluminium mast.
- Each folded dipole balun assembly and associated harness junction is completely encapsulated in epoxy resin, totally preventing moisture ingress.
- The balun assembly has been tested to BS5490:IP67.
- The parallel feed enables beam tilt to be easily achieved, and the dipoles can be reorientated to shape the beam pattern.
- At VHF the antenna disassembles and flat packs for ease of shipping.



ELECTRIAL	
FREQUENCY RANGE	117 - 470 MHz
INPUT IMPEDANCE	50Ω
BANDWIDTH	± 4% of centre frequency
SWR	<1.5:1
FRONT TO BACK RATIO	5.5 dB
MAXIMUM INPUT POWER	250 Watts
POLARISATION	Vertical
FORWARD GAIN	5 dBd
3 dB BEAMWIDTH	E Plane 36° H Plane 180°
MECHANICAL	
STANDARD CONNECTION	3 m (118.11 in.) Length of RG 213 c/w 'N' type socket
ELEMENTS	12.7 mm dia. x 1.6 mm wall aluminium alloy grade 6063T6
SUPPORT BOOM UHF	UHF 38.1 mm dia. x 3.2 mm wall aluminium alloy grade 6082T6
SUPPORT BOOM VHF	VHF 63.5 mm dia. x 6.3 mm 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 UHF	UHF fit inside scaffold pole
MOUNTING BRACKETS VHF	VHF to suit structure
TYPICAL WEIGHT (UHF)	UHF 4 kg (8.82 lb.)
TYPICAL WEIGHT (VHF)	VHF 9 kg (19.84 lb.)
TYPICAL LENGTH (UHF)	UHF 1.25 m (49.21 in.)
TYPICAL LENGTH (VHF)	VHF 4 m (157.48 in.)
TYPICAL WIND LOADING @ 162 km/h (UHF)	UHF 85N
TYPICAL WIND LOADING @ 162 km/h (VHF)	VHF 292N

### ORDERING DESIGNATIONS

TYPE	FREQUENCY	PRODUCT NO.
S.M2-127	117 - 137 MHz	123003110
S.M2-165	155 - 175 MHz	123003111
S.M2-184	176 - 192 MHz	123003112
S.M2-200	192 - 208 MHz	123003113
S.M2-405	380 - 430 MHz	123003114
S.M2-445	420 - 470 MHz	123003115

### MOUNTING ACCESSORIES TO BE ORDERED SEPARATELY

TYPE	PRODUCT NO.
UA66-22	123001005
2140.01.00.00	123001012
2141.01.00.00	123001013

MOUNTING ACCESSORIES



UA66-22

Very strong square cast alloy clamp, fits up to 50 mm diameter tubes as either a cross-over or parallel clamp. Supplied with two stainless steel 'U' bolts.



2140.01.00.00

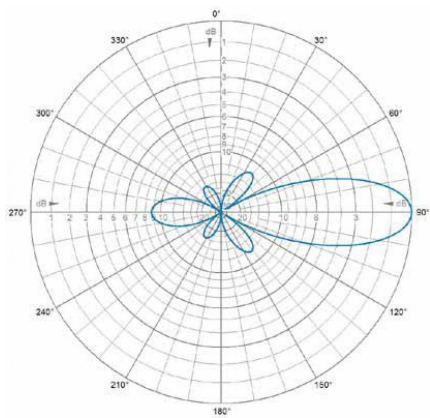
Parallel clamps, in galvanised steel with stainless steel fixings, fits from 25-60 mm diameter tubes.



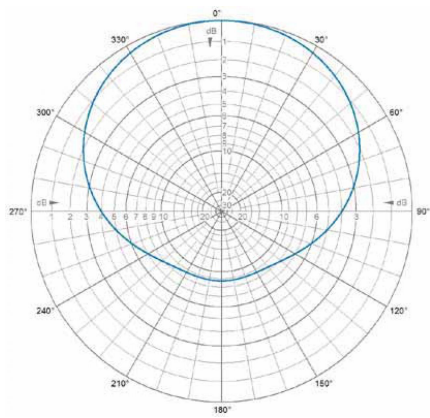
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Parallel clamps, in galvanised steel with stainless steel fixings, fits from 38-60 mm diameter tubes.

TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



PROCOM A/S reserve the right to amend specifications without prior notice.  
28/11/14