

## S.1 series

### Centre-fed folded dipole antenna.

- The S.1 series are of a rugged and reliable construction.
- The one piece folded dipole incorporates a d.c. short to minimise static interference.
- The balun assembly is completely encapsulated in epoxy resin, totally preventing moisture ingress, and has been tested to BS5490:IP67.
- These antennas can be arranged in a variety of arrays in combination with CPS (cable power splitter) series to produce a wide range of radiation patterns.
- They are supplied as standard with 3 metres of RG 213 cable terminated with an 'N' type socket.
- Heavy duty and stainless steel options are available.



### ORDERING DESIGNATIONS

TYPE	FREQUENCY	PRODUCT NO.
S.1-72	66 - 80 MHz	Replaced by 7050060
S.1-82	70 - 86 MHz	Replaced by 7050075
S.1-98	88 - 108 MHz	Replaced by 7050088
S.1-127	117 - 137 MHz	Replaced by 7050118
S.1-160	145 - 176 MHz	Replaced by 7050158
S.1-200	192 - 208 MHz	Replaced by 7050170
S.1-405	380 - 430 MHz	Replaced by 7051400
S.1-380-470	380 - 470 MHz	Replaced by S.1-380-470
S.1-445	420 - 470 MHz	Replaced by 7051420
S.1-475	430 - 520 MHz	Replaced by S.1-475

### SPECIFICATIONS

ELECTRICAL	
FREQUENCY RANGE	66 - 520 MHz
INPUT IMPEDANCE	50 Ω
BANDWIDTH	± 10% of centre frequency
SWR	< 1.5:1
FRONT TO BACK RATIO	4 dB
MAXIMUM INPUT POWER	150 W
POLARIZATION	Vertical
FORWARD GAIN	2 dBd
3 dB BEAMWIDTH	E Plane 85° H Plane 200° (Gain & RPE assumes mount on conductive pole)
MECHANICAL	
STANDARD CONNECTION	3 m (118.11 in.) Length of RG 213 c/w 'N' type socket
ELEMENTS (UHF) (> 138 MHz)	UHF 12.7 mm dia. x 1.6 mm (0.50 in. dia x 0.06 in.) wall aluminium alloy grade 6063T6
ELEMENTS (VHF) (< 138 MHz)	VHF 19.0 mm dia. x 1.6 mm (0.75 in. dia x 0.06 in.) wall aluminium alloy grade 6063T6
SUPPORT BOOM	31.7 mm dia. x 2.6 mm (1.25 in. dia x 0.10 in.) wall aluminium alloy grade 6082T6
FASTENERS	Stainless steel grade A2-70
SADDLE CLAMPS	Diecast zinc alloy
INSULATOR	Epoxy resin encapsulant
LIGHTNING PROTECTION	Direct grounded
MOUNTING BRACKETS	See mounting accessories (not supplied)
TYPICAL WEIGHT (UHF)	UHF 1.9 kg (4.19 lb.)
TYPICAL WEIGHT (VHF)	VHF 2.8 kg (6.17 lb.)
TYPICAL LENGTH (UHF)	UHF 1 m (39.37 in.)
TYPICAL LENGTH (VHF)	VHF 1.33 m ( 52.36 in.)
TYPICAL WIND LOADING @ 162 km/h (UHF)	UHF 54 N
TYPICAL WIND LOADING @ 162 km/h (VHF)	VHF 148 N

## MOUNTING ACCESSORIES

Mounting accessories to be ordered separately.

TYPE	DIMENSION	PRODUCT NO.
1763-100		123001001
UA64-23	25 - 50 mm	123001006
UA64-23	25 - 76 mm	123001007
UA66-24	25 - 50 mm	123001017
UA66-24	25 - 76 mm	123001018
UA66-24	25 - 100 mm	123001019
UA66-24	25 - 115 mm	123001020



### 1763-100

Galvanised steel-cross-over clamp, fits 32 mm (1-1/4") diameter antenna booms to up to 50 mm (2") diameter poles, max. length 1500 mm.



### UA64-23

Circular cast alloy clamp, gives a good two point fixing, supplied as standard with 4 x 50 mm stainless steel 'U' bolts and two half-moon cast spacers to fit antenna booms of 25 to 50 mm diameter. Will also accomodate 76 mm (3") 'U' bolts to fit masts of that diameter. (order UB06).



### UA66-24

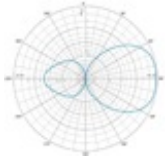
Rectangular cast alloy clamp, gives a good two point fixing, supplied as standard with 4 x 50 mm stainless steel 'U' bolts and two half-moon cast spacers to fit antenna booms of 25 to 50 mm diameter.

To fit 76 mm (3") masts (order UB06 'U' bolts).

To fit 100 mm (4") masts (order UB07 'U' bolts).

To fit 115 mm (4 1/2") masts (order UB09 'U' bolts).

TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

