

S.1H series

Heavy duty centre-fed folded dipole antenna.

- The S.1H series are designed for use in extreme environments, or for multi channel applications.
- The one piece folded dipole assembly incorporates a d.c. short and is completely encapsulated in epoxy resin, totally preventing moisture ingress.
- A sleeve is welded to the dipole to increase strength, and improve VSWR.
- These antennas can be arranged in a variety of arrays to produce a wide range of radiation patterns.
- They are supplied as standard with 3 m of RG 213 cable terminated with an 'N' type socket.



ORDERING DESIGNATIONS

S.1H-78	66 - 88 MHZ	123003020
S.1H-98	88 - 108 MHZ	123003021
S.1H-127	117 - 137 MHZ	123003022
S.1H-165	155 - 175 MHZ	123003023

SPECIFICATIONS

ELECTRICAL	
FREQUENCY RANGE	66 - 175 MHz
INPUT IMPEDANCE	50Ω
BANDWIDTH	± 10% of centre frequency
SWR	<1.5:1
FRONT TO BACK RATIO	4 dB
MAXIMUM INPUT POWER	500 Watts
POLARISATION	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	19.0 mm dia. x 1.6 mm (0.75 in. dia x 0.06 in.) wall aluminium alloy grade 6063T6
DIPOLE SLEEVE (WELDED)	31.7 mm dia. x 2.6 mm (1.25 in. dia x 0.10 in.) wall aluminium alloy grade 6063T6
SUPPORT BOOM	48.4 mm dia. x 4.5 mm (1.91 in. dia x 0.18 in.) wall aluminium alloy grade 6082T6
FASTENERS	Stainless steel grade A2-70
SADDLE CLAMPS	Machined aluminium alloy
INSULATOR	Epoxy resin encapsulant
LIGHTNING PROTECTION	Direct grounded
MOUNTING BRACKETS	See mounting accessories (not supplied)
TYPICAL WEIGHT	5.3 kg (11.68 lb.)
TYPICAL LENGTH	1.5 m (59.06 in.)
TYPICAL WIND LOADING @ 162 km/h	202 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 accommodate 76 mm (3") 'U' bolts to fit masts of that diameter. (order UB06).



UA66-24

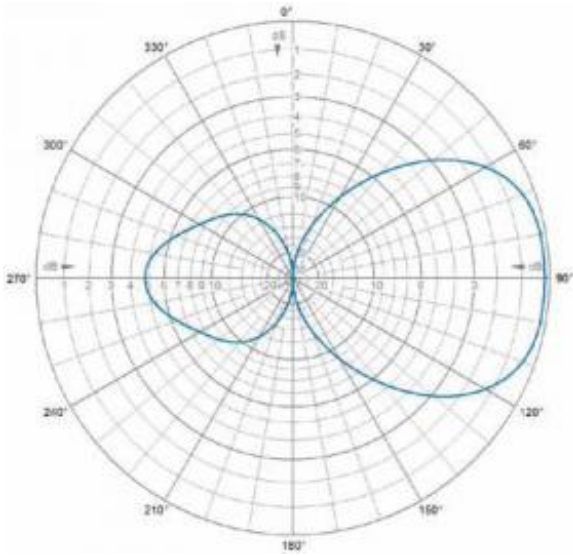
Rectangular cast alloy clamp, gives a good two point fixing, supplied as standard with 4 x 50 mm stainless steel 'U' bolts and two half-moon cast spacers to fit antenna booms of 25 to 50 mm diameter.

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)

