

The S.8Y Series are of a rugged and reliable construction for long range communication networks at both VHF & UHF. 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 give a gain of 10dBd with front to back ratio typically 18dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.

The S.8Y is approved to MPT1411: Part 2.

## Electrical & mechanical specifications

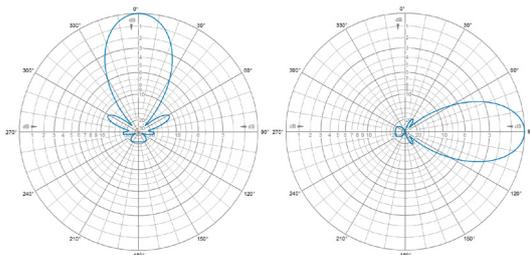


<b>Frequency range</b>	145 - 500 MHz
<b>Input impedance</b>	50Ω
<b>Bandwidth</b>	± 4% of Centre Frequency
<b>VSWR</b>	<1.5:1
<b>Front to back ratio</b>	18 dB
<b>Maximum input power</b>	150 Watts
<b>Polarisation</b>	Vertical & Horizontal
<b>Forward gain</b>	10 dBd
<b>3dB Beamwidth</b>	<b>E Plane</b> 43¼ <b>H Plane</b> 50¼
<b>Standard connection</b>	3m Length of RG213 c/w 'N' type socket
<b>Elements</b>	12.7mm dia. x 1.6mm wall Aluminium Alloy Grade 6063T6
<b>Support boom</b>	31.7 mm dia. x 2.6 mm wall Aluminium Alloy Grade 6082T6
<b>Fasteners</b>	Stainless Steel Grade A2-70
<b>Saddle clamps</b>	Diecast Zinc Alloy
<b>Insulator</b>	Epoxy Resin Encapsulant
<b>Lightning protection</b>	Direct Grounded
<b>Mounting brackets</b>	COP series (not supplied)
<b>Typical weight</b>	<b>VHF</b> 5.2 kg <b>UHF</b> 3 kg
<b>Typical length</b>	<b>VHF</b> 4 m <b>UHF</b> 1.6 m
<b>Typical wind loading @ 45m/s</b>	<b>VHF</b> 230 N <b>UHF</b> 127 N

### Free space radiation patterns

**H-Plane**

**E-Plane**



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### Mounting accessories



**271 Series**  
Cast aluminium cross clamp 30-60mm



**COP54**  
Galvanised steel cross clamp 32/50mm



**UA Series**  
Cast aluminium cross clamp 25-115mm

### Standard stock models

Stock code	Frequency
<b>S.8Y/395</b>	380-410MHz
<b>S.8Y/420</b>	410-430MHz
<b>S.8Y/445</b>	420-470MHz



This product is RoHS compliant

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