

Three Element Yagi Antenna

The S.3Y Series are of a rugged and reliable construction for 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 antennæ give a gain of 6dBd with front to back ratio typically 15 dB. 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.

electrical and mechanical specifications

<i>Frequency range</i>	68 - 500 MHz
<i>Input Impedance</i>	50 Ohms
<i>Bandwidth</i>	± 6% of Centre Frequency
<i>VSWR</i>	< 1.5:1
<i>Front to Back Ratio</i>	15 dB
<i>Maximum Input Power</i>	150 Watts
<i>Polarisation</i>	Vertical & Horizontal
<i>Forward Gain</i>	6 dBd.
<i>3 dB Beamwidth</i>	<i>E Plane</i> 62° <i>H Plane</i> 84°
<i>Connection</i>	3 m Length of RG 213 c/w 'N' type socket. (RG11 / UR57)
<i>Elements</i>	VHF 19.0mm dia.x 1.6mm wall UHF 12.7mm dia. x 1.6mm wall Aluminium Alloy Grade 6063T6
<i>Support Boom</i>	31.7 mm dia. x 2.6 mm wall Aluminium Alloy Grade 6082T6
<i>Fasteners</i>	Stainless Steel Grade A2-70
<i>Saddle clamps</i>	Diecast Zinc Alloy.
<i>Insulator</i>	Epoxy Resin Encapsulant.
<i>Lightning protection</i>	Direct Grounded
<i>Mounting Brackets</i>	COP series (not supplied)
<i>Typical Weight</i>	VHF 4.5 kg UHF 1.5 kg
<i>Typical Length</i>	VHF 2.2 m UHF 0.7 m
<i>Typical Wind loading @ 45m/s</i>	VHF 240 N. UHF 52 N



Optional Mounting Bracketry

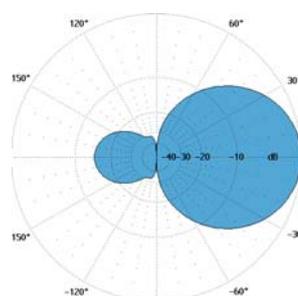


COP54
Galvanised Steel
Crossover Plate
To suit 2" tube

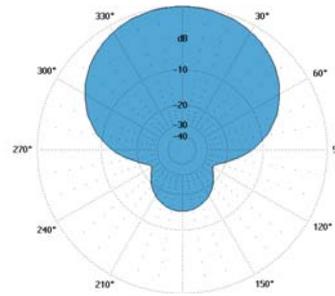


271 series
Cast Aluminium
Crossover Clamp
To suit 30-120mm tube

E Plane



H Plane



Free Space Radiation Patterns

(ASCII Files available upon request)