

ANW-V Wide Band Yagis 68-235 MHz



Rugged Construction
Wide Bandwidth
Fully Waterproofed
Good Front to Back Ratio
Stacked & Bayed Arrays



Type ANW-V range of rugged wide band directional antennas has been designed for use on frequencies between 68 and 235 MHz. Yagis of two, three or four elements are available for any frequency in the band. Six element yagis are available for frequencies above 100 MHz and eight element yagis above 140 MHz. The standard models have generous overlap with adjacent frequency banded models and the nearest band model will normally be supplied for the frequency specified in the order. These yagis may be stacked and/or bayed for additional gain. For full details refer to Base Station Antennas Application Notes.

ELECTRICAL SPECIFICATIONS															
	2-Element		3-Element		4-Element		6-Element		8-Element						
Frequency Range:	68-235 MHz		68-235 MHz		68-235 MHz		96-235 MHz		137-235 MHz						
Bandwidth (typical)	12%		12%		12%		12%		12%						
VSWR: (typical)	1.5:1		1.5:1		1.5:1		1.5:1		1.5:1						
Lightning Protection:	DC ground		DC ground		DC ground		DC ground		DC ground						
Impedance:	50 ohms		50 ohms		50 ohms		50 ohms		50 ohms						
SPEC POINT IN BAND	Lo	Mid	Hi	Lo	Mid	Hi	Lo	Mid	Hi	Lo	Mid	Hi			
Gain (Rel. $\lambda/2$ dipole):	4.6	3.7	3.1	4.8	4.7	5.4	6.3	6.7	7.4	7.9	8.7	9	8.9	10	10.3
E-Plane Beamwidth @ 3dB degrees	± 34	± 36	± 36	± 34	± 34	± 33	± 32	± 30	± 28	± 28	± 25	± 21	± 25	± 22	± 18
H-Plane Beamwidth @ 3dB degrees	± 60	± 74	± 82	± 60	± 62	± 56	± 47	± 44	± 36	± 35	± 30	± 24	± 30	± 25	± 20
Front to Back Ratio dB	8	10	9	14	18	16	14	14	16	15	15	19	18	16	20
MECHANICAL SPECIFICATIONS															
Termination:	N male		N male		N male		N male		N male						
Approx. Boom Length Relative to Freq. 80 MHz	1400mm		1175 mm		2210mm		-----		-----						
120 MHz	1120 mm		735 mm		1360 mm		2500 mm		-----						
160 MHz	1030 mm		1175 mm		1670 mm		2000 mm		3000 mm						
200 MHz	965 mm		1078 mm		1485 mm		1660 mm		2500 mm						
235 MHz	940 mm		1035 mm		1400 mm		1500 mm		2280 mm						
Boom Diameter	38 mm O.D		38 mm O.D		38 mm O.D		38 mm O.D		38 mm O.D						
Dipole Element Diameter	19 mm O.D		19 mm O.D		19 mm O.D		19 mm O.D		19 mm O.D						
Weight 80 MHz	3.85 kg		5.2 kg		7.0 kg		-----		-----						
120 MHz	2.9 kg		3.85 kg		5.2 kg		7.4 kg		-----						
160 MHz	2.5 kg		3.3 kg		4.5 kg		6.35 kg		7.9 kg						
200 MHz	2.3 kg		3.0 kg		4.0 kg		5.8 kg		7.1 kg						
235 MHz	2.1 kg		2.8 kg		3.6 kg		5.2 kg		6.5 kg						
Rated Wind Velocity:	193km/hr		193 km/h		193 km/h		193 km/h		193 km/h						
Horizontal Thrust @ rated Wind 80 MHz	21.7 kg		33.1 kg		43.9 kg		-----		-----						
120 MHz	14 kg		22.2 kg		30.3 kg		47.1 kg		-----						
160 MHz	10.8 kg		16.7 kg		24.5 kg		34.9 kg		46.7 kg						
200 MHz	8.1 kg		13.5 kg		20.1 kg		26 kg		34 kg						
235 MHz	7.5 kg		11.2 kg		18.2 kg		22 kg		28 kg						

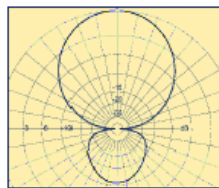
ANW-V Wide Band Yagis 68-235 MHz



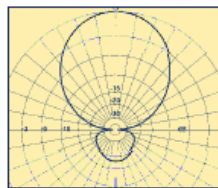
Mounting: Order Separately	Mounts to a 29-51mm pipe using cross-over/Parallel clamp pt. no. 9637423 or heavy duty cross-over clamp 9637875. Mounts to a 76mm pipe using heavy duty cross-over clamp 9638068 Parallel Clamp for connecting booms of 29-51 in parallel pt. No 9638501 (2 required) Cantilever Mounting: Use two x 9638501 with 9637875 or 9638068				
MATERIALS					
Boom	38mm O.D 10swg polished extruded aluminium				
Dipole & Elements	19mm O.D 16swg polished extruded aluminium				
Dipole Box	UV Stabilised injection moulded polypropylene				
Fasteners	UV stabilised injection moulded polypropylene element saddles. Stainless steel nuts & bolts				
Clamps	Aluminium Casting. Stainless steel nuts and U-bolts				
STANDARD MODELS					
Frequency Band	2-Element	3-Element	4-Element	6-Element	8-Element
68-76 MHz	ANW2V70	ANW3V70	ANW4V70	-----	-----
71-80 MHz	ANW2V75	ANW3V75	ANW4V75	-----	-----
74-83 MHz	ANW2V80	ANW3V80	ANW4V80	-----	-----
78-88 MHz	ANW2V85	ANW3V85	ANW4V85	-----	-----
88-99 MHz	ANW2V95	ANW3V95	ANW4V95	-----	-----
96-108 MHz	ANW2V100	ANW3V100	ANW4V100	ANW6V100	-----
108-122 MHz	ANW2V110	ANW3V110	ANW4V110	ANW6V110	-----
122-137 MHz	ANW2V125	ANW3V125	ANW4V125	ANW6V125	-----
137-154 MHz	ANW2V140	ANW3V140	ANW4V140	ANW6V140	ANW8V140
145-163 MHz	ANW2V155	ANW3V155	ANW4V155	ANW6V155	ANW8V155
154-174 MHz	ANW2V165	ANW3V165	ANW4V165	ANW6V165	ANW8V165
174-196 MHz	ANW2V190	ANW3V190	ANW4V190	ANW6V190	ANW8V190
188-212 MHz	ANW2V200	ANW3V200	ANW4V200	ANW6V200	ANW8V200
208-235 MHz	ANW2V220	ANW3V220	ANW4V220	ANW6V220	ANW8V220

The Standard model nos. shaded do not have the boom extended behind the reflector element for end mounting. If a boom extension is required for end mounting specify the model no/61cm e.g. AN3V70/61cm. Due to it's overall size and weight it is recommended that 8-element type AN8V is cantilever mounted using a separate support boom and two parallel clamps 9638501

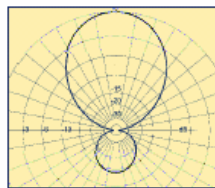
Typical E-Plane Polar Diagrams



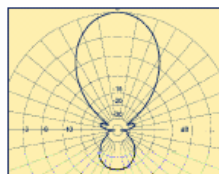
2-element Yagi type ANW2V



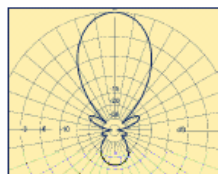
3-element Yagi type AN3V



4-element Yagi type ANW4V



6-element Yagi type ANW6V



8-element Yagi type ANW8V



Pt. No. 9638501 (2 required)



Pt. No. 9637423



Pt. No. 9637875