

Section 2

BROADCAST ANTENNAS

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Yagi Y800-20RL Series UHF TV Single Dipole

Frequency
700 – 820 MHz

Bandwidth
8 CHANNELS



The Yagi Y800-20RL Series are a single dipole design which can cover any 8 consecutive UHF TV channels you specify within the upper Band V frequency range 700 to 820 MHz, Channels 53 to 69.

Return loss will be optimised to better than -20 dB across your chosen 8 channel range.

When you only need to cover a limited number of UHF TV channels, then these single dipole directional Yagi broadcast antennas will be your most economical solution.

Constructed from either aluminium or stainless steel, the range consists of 6, 9 and 15 element models varying from 9 dBd up to 14 dBd forward gain.

The Yagi's may be mounted either horizontal or vertical as required. All models have a short 250 mm RG59 cable tail terminated with an N-Female connector rated for up to 50 watts input power. A strut kit is highly recommended to properly support the boom of the 15 element **Y815-20RL** models.

A mast mounting clamp, feeder cable, connectors and other accessories are all available separately to complete the antenna installation.



SPECIFICATIONS	Y806-20RL	Y809-20RL	Y815-20RL
Construction	Aluminium, or add letters SS to the code for Stainless Steel		
Frequency	Within the UHF TV range 700 to 820 MHz		
Maximum Bandwidth	Specify any 8 consecutive UHF TV Channels in Band V, Channels 53 to 69		
	60 MHz	60 MHz	60 MHz
Return Loss, VSWR	Better than -20 dB, < 1.2:1 across the 8 channels specified		
Tuning	Factory		
Number Of Elements	6	9	15
Nominal Gain	9 dBd	11.5 dBd	14 dBd
Polarisation	Mount the Yagi either Horizontal or Vertical as required		
Maximum Input Power	50 Watts		
Impedance	50 Ohms		
E-Plane at 3 dB	46°	34°	28°
H-Plane at 3 dB	51°	42°	30°
Front-to-Back Ratio	17.8 dB	15 dB	15 dB
Cable Tail	All models have a 250 mm RG59 cable tail		
Connector	N-Female connector fitted to the cable tail		
Boom Length at 850 MHz	0.6 metre	0.97 metre	1.85 metres
Longest Element	210 mm		
Weight in Aluminium	0.5 kg	0.7 kg	1.0 kg
Weight in Stainless Steel	1.2 kg	1.5 kg	2.6 kg
Projected Area	0.035 m ²	0.054 m ²	0.075 m ²
Wind Load at 160 kph	4.5 kg	6.5 kg	9.5 kg
Strut Kit Recommended	Not required	Not required	YS1-48
Mast Mounting Clamp (Not Supplied)	1 x A48 recommended for Aluminium Yagi 1 x S48 recommended for Stainless Steel Yagi		
Warranty	2 Years	2 Years	2 Years



The **A48** right-angle clamp has an aluminium plate, galvanised steel vee blocks with stainless steel U bolts, nuts and washers. The **S48** clamp has all stainless steel components.

These clamps mount a 25 mm square boom Yagi to a round mast between 30 and 50 mm in diameter.