

## Section 2

### BROADCAST ANTENNAS

Updated 16 February 2011

#### Yagi Y200-1722 Series VHF TV Channels 6 to 12

**Frequency**  
174 – 230 MHz

**Bandwidth**  
FULL BAND



The Yagi Y200-1722 Series will cover the full VHF TV Channel range 6 to 12 inclusive, 174 to 230 MHz. They are ideal for off air receive and low power transmit applications.

The range includes 4, 6 and 9 element models with gain varying from 6 dBd up to 10.5 dBd.

Bandwidth is achieved by feeding a pair of dipoles in a small log cell. Return loss is optimised to better than -20 dB broadcast standard across the entire channel range.

Construction is from aluminium with stainless steel dipoles. Fully stainless steel models are also available. A strut kit is necessary to support these large Yagi's.

Mount these UHF TV Yagi antennas Horizontal or Vertical as required.



SPECIFICATIONS	Y204-1722	Y206-1722	Y209-1722
<b>Construction</b>	Aluminium with stainless steel dipoles, or add letters <b>SS</b> to the Order Code for the fully Stainless Steel model		
<b>Frequency Range and Bandwidth</b>	174 to 230 MHz Full Band	174 to 230 MHz Full Band	174 to 230 MHz Full Band
<b>Channel Coverage</b>	6 to 12, VHF Band 3	6 to 12, VHF Band 3	6 to 12, VHF Band 3
<b>Tuning</b>	All models are tuned in the factory to the frequency range indicated		
<b>Return Loss, VSWR</b>	Better than -20 dB, < 1.2:1 across the full frequency range indicated		
<b>Number of Elements</b>	4	6	9
<b>Nominal Gain</b>	6 dBd	7.5 dBd	10.5 dBd
<b>Polarisation</b>	All models can be mount either Horizontal or Vertical as required		
<b>Maximum Power</b>	250 Watts	250 Watts	250 Watts
<b>Impedance</b>	50 Ohms	50 Ohms	50 Ohms
<b>E-Plane</b>	82°	64°	42°
<b>H-Plane</b>	96°	80°	48°
<b>Front-to-Back Ratio</b>	17 dB	18 dB	20 dB
<b>Cable Tail</b>	All models have a 1.4 metre RG213 cable tail		
<b>Connector</b>	An N-Female connector is fitted to the cable tail		
<b>Boom Length</b>	1.5 metres	1.65 metres	3.1 metres
<b>Max Element Length</b>	0.8 metres	0.85 metres	0.85 metres
<b>Weight in Aluminium</b>	7.0 kg	8.0 kg	11.0 kg
<b>Weight in S/Steel</b>	9.1 kg	10.4 kg	14.3 kg
<b>Projected Area</b>	0.134 m <sup>2</sup>	0.143 m <sup>2</sup>	0.205 m <sup>2</sup>
<b>Wind Load 160 kph</b>	8.9 kg, 0.087 kN	17.269 kg, 0.169 kN	24.794 kg, 0.243 kN
<b>Strut Kit (Not supplied)</b>	<b>YS1-23</b> single strut kit recommended	<b>YS1-23</b> single strut kit recommended	<b>YS2-23</b> 2-way strut kit recommended
<b>Mounting Clamp (Not supplied)</b>	<b>Y2300</b> heavy duty galvanised steel right angle clamp recommended for Aluminium models. <b>Y2300SS</b> heavy duty stainless steel right angle clamp recommended for Stainless Steel models. Suit masts 30 to 50 mm diam.		
<b>WARRANTY</b>	<b>2 Years</b>	<b>2 Years</b>	<b>2 Years</b>