

Section 2

BROADCAST ANTENNAS

Updated 16 February 2011

UHF MATV Yagi, 75 Ohm, Double-Dipole Broadband

Frequency
520 – 820 MHz

Bandwidth
15 CHANNELS

ZCG
SCALAR
BROADCAST SOLUTIONS

These 75 Ohm Yagi antennas are specifically designed for MATV Mast Amplified TV receive systems at professional broadcast installations.

Key features are:

- A double-dipole design to deliver genuine broadband coverage.
- Specify any 15 consecutive UHF TV Channels for a 105 MHz bandwidth within the range 520 to 820 MHz, Channels 27 through 69.

Constructed entirely from stainless steel for long term reliable service, both 9 element 11.5 dBd and 15 element 14 dBd models are available.

A compression strut kit is supplied with the 15 element model. This single strut supports the antenna boom weight from underneath. No strut kit is necessary for the 9 element model.

Each Yagi has a short RG59 cable tail fitted with a 75 Ohm BNC Male connector rated for up to 50 watts input power. A mounting clamp, coaxial feeder cable, connectors and cable fittings are all available separately.



Y609TVSS-75

| SPECIFICATIONS | Y609TVSS-75 | Y615TVSS-75 |
|----------------------------------|---|----------------------------|
| Construction | All stainless steel 25 mm square boom, double-dipoles and elements | |
| Frequency | Within the range 520 to 820 MHz | |
| Bandwidth | Specify any 15 consecutive UHF TV channels in Band IV and Band V, Channels 27 to 69 | |
| | 105 MHz | 105 MHz |
| Return Loss, VSWR | Better than -15 dB, < 1.5:1 across the selected 15 consecutive channel range | |
| Tuning | Factory | Factory |
| Number of Elements | 9 | 15 |
| Nominal Gain at Centre Frequency | 11.5 dBd | 14 dBd |
| Polarisation | Mount either Horizontal or Vertical as required | |
| Maximum Input Power | 50 Watts | 50 Watts |
| Impedance | 75 Ohms | 75 Ohms |
| E Plane | 40° | 33° |
| H Plane | 46° | 42° |
| DC Grounding | Yes | Yes |
| Front-to-Back Ratio | 20 dB | 20 dB |
| 75 Ohm Cable Tail | RG59 | RG59 |
| 75 Ohm Connector | BNC Male fitted | BNC Male fitted |
| Boom Length | 1.2 metres | 1.85 metres |
| Longest Element | 28 cm | 28 cm |
| Weight | 1.5 kg | 2.5 kg |
| Projected Area | 0.060 m ² | 0.088 m ² |
| Wind Load at 160 kph | 7.3 kg, 0.072 kN | 8.4 kg, 0.083 kN |
| Strut Kit | None required | YS1-C48 is supplied |
| Mounting Clamp (Not supplied) | 1 x S48 is recommended | |



The **S48** right-angle clamp has all stainless steel components and will mount a 25 mm square boom Yagi to a round mast between 30 and 50 mm in diameter.

Available to order separately.