

Section 2

BROADCAST ANTENNAS

Updated 3 August 2011

ZVHP VHF TV Horizontally Polarised Panel Channels 6 to 12

Frequency
174 – 230 MHz

Bandwidth
Full Band



ZVHP is a horizontally polarised broadband panel covering the entire VHF TV Band 3 frequency range 174 to 230 MHz, Channels 6 through 12. Factory tuned with no field adjustment necessary, nominal gain is 11 dBd.

The forward radiation pattern for a single panel is directional. These panels may be used alone or mounted in multiple array formations with an appropriate power divider to achieve the desired coverage pattern.

4 dipoles are welded in line onto a galvanised back screen.

Return loss is optimised for better than -20 dB return loss, < 1.2:1 VSWR across the full channel range 6 to 12. Or, for any single VHF TV channel nominated, return loss can be optimised to better than -26 dB.

Stainless steel U-Bolts are supplied for mounting the panel to a mast between 50 mm and 60 mm in diameter. Alternatively, these panels can be bolted to a support structure using 4 x M12 bolts.

Other options available are :

- Power dividers with 7/16" DIN or 7/8" EIA connectors for higher power.
- Power dividers for multiple array formations.

SPECIFICATIONS	ZVHP
Construction	Stainless steel, brass and galvanised steel, fibreglass cover
Frequency and Channel Range	174 to 230 MHz, VHF TV Band 3 Channels 6 to 12 full band
Return Loss, VSWR	Better than -20 dB, < 1.2:1 across full band, <i>OR better than -26 dB for any single channel</i>
Tuning	Factory
Polarisation	Horizontal
Nominal Gain	11 dBd
Max Input Power	250 Watts TV
Impedance	50 Ohms
DC Grounding	Yes
Elevation Beamwidth	60°
Power Divider Input	N-Female <i>Note : For higher power, 7/16" DIN and 7/8" EIA power divider are available</i>
Panel Dimensions	3 metres high x 1.4 metres wide x 0.6 metres
Weight	65 kg
Projected Area	1.2 m ²
Wind Load at 160 kph	0.928 kN, 94.727 kg
Mounting	2 x stainless steel U-Bolts are supplied to suit a round mast between 50 mm and 60 mm in diameter. Otherwise bolt the panel directly to a support structure.
WARRANTY	2 Years