

Section 2

BROADCAST ANTENNAS

Updated 16 February 2011

ZSL Series UHF TV Horizontal Slot

Frequency
520 – 820 MHz

Bandwidth
See Table



Featuring a horizontal radiation pattern and high 9.5 dBd gain, the ZSL series of slot antennas are designed for UHF TV broadcast in Bands IV and V. Three models cover separate channel groups throughout the range 27 to 69.

Benefits of these slot antennas include :

- Horizontal polarisation for better propagation across the ground.
- The broad bandwidth allows flexibility to combine multiple television channels using a single antenna.
- High gain and low wind loading.
- The antenna occupies minimal tower space.
- The rugged and light weight design consists of brass and stainless steel with aluminium mounting base. The heavy duty fibreglass radome is 3 mm thick and coated with two pack epoxy to ensure the antenna will survive the most extreme environments over a long service life.
- DC grounded for lightning protection and minimising of precipitation noise.

An N-female connector rated for up to 200 watts input power is located at the base of the mount tube.

Mast mounting clamps, coaxial feeder cable, connectors and other accessories are all available to complete the installation.

SPECIFICATIONS	ZSL5262	ZSL6172	ZSL7182
Construction	Brass and stainless steel internals, aluminium mount tube, heavy duty white fibreglass radome		
Frequency Range	UHF TV 520 to 620 MHz Full Band	UHF TV 610 to 720 MHz Full Band	UHF TV 708 to 820 MHz Full Band
UHF TV Channel Coverage	Channels 27 to 40 inclusive	Channels 40 to 54 inclusive	Channels 54 to 69 inclusive
Tuning	Factory	Factory	Factory
Return Loss, VSWR	Better than -20 dB, less than 1.2:1 across the channel range indicated		
Gain	9.5 dBd	9.5 dBd	9.5 dBd
Maximum Power	200 Watts	200 Watts	200 Watts
Impedance	50 Ohms	50 Ohms	50 Ohms
DC Grounding	Yes	Yes	Yes
Polarisation	Horizontal	Horizontal	Horizontal
Cable	None	None	None
Connector	An N-Female connector is located at the base of the mount tube		
Height	3.0 metres	2.7 metres	2.2 metres
Weight	18 kg	15 kg	10 kg
Radome Diameter	168 mm	130 mm	110 mm
Mount Tube Diameter	63 mm	63 mm	63 mm
Projected Area	0.29 m ²	0.25 m ²	0.21 m ²
Wind Load at 160 kph	39 kg, 0.40 kN	35 kg, 0.36 kN	33 kg, 0.34 kN
Mounting Clamps (Not supplied)	2 x UAM180L heavy duty galvanised steel parallel clamps are recommended. Suit round mast between 40 and 75 mm diameter.		
Warranty	2 Years	2 Years	2 Years

