

Section 5

CELLULAR MOBILE PHONE ANTENNAS

Updated 18 February 2011

Yagi Y2009 3G Directional Mast Mount Base Station Antenna

Frequency
1900 – 2100 MHz

Bandwidth
3G Network



The Yagi model Y2009 mast mount base station antenna will provide directional coverage of the 3G cellular mobile phone network operating in the frequency range 1,900 to 2,170 MHz.

Constructed from brass and aluminium, this 9 element Yagi delivers 11.3 dBi forward gain. The ultra violet resistant PVC radome protects the internals.

The short RG58 low loss cable tail is terminated with an N-Female connector rated for up to 25 watts input power.

U-bolts are supplied for mounting to a mast up to 50 mm in diameter.

Mount the Yagi vertical for 3G network reception.

Feeder cable, connectors and fittings are all available separately to complete the installation.



For higher gain and power, this Yagi may be mounted in a stack array formation.

When mounted vertical for the 3G network, the Yagi's should be spaced 150 mm apart.

SPECIFICATIONS	Y2009
Construction	Brass and aluminium internals enclosed inside an ultra violet resistant white PVC radome. (A black radome is available.)
Cellular Mobile Phone Network Coverage	3G, 1900 to 2170 MHz
Bandwidth	Full Band
Return Loss, VSWR	Better than -15 dB, less than 1.5:1
Tuning	Factory
Number of Elements	9
Gain	11.3 dBi
Maximum Input Power	25 Watts
Impedance	50 Ohms
Polarisation	Mount the Yagi Vertical for 3G Network
E-Plane	43°
H-Plane	36°
Front-to-Back Ratio	-20 dB
DC Grounding	Yes
Cable Tail	RG58 Low Loss
Connector	N-Female fitted
Length	300 mm
Width	80 mm
Weight	1.5 kg
Projected Area	0.015 m ²
Wind Load at 160 kph	1.82 kg
Mounting	U-Bolts are supplied for mounting to a round mast up to 50 mm in diameter