

Section 1b

AIR BAND ANTENNAS

Updated 14 February 2011

G12 Air Band Collinear

Frequency
85 – 140 MHz

Bandwidth
Any 5 %



Where some gain is desired for omnidirectional Air Band communications, then consider the G12 collinear base station antenna. With 3 dBd gain, this collinear can be manufactured to cover any 5% bandwidth within the frequency range 118 to 136 MHz.

Built to full commercial standard, the radiating elements are enclosed within a robust fibreglass radome providing full protection against the elements and minimal wind loading.

An N-Female connector rated for up to 250 watts power is located at the base of the aluminium mount tube.

If a power rating higher than 250 watts is required, please contact ZCG Scalar for advice.

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

SPECIFICATIONS	G12
Construction	Aluminium internals, white fibreglass tapered radome and aluminium mount tube
Frequency Range	85 to 140 MHz. Suitable for air band communications in the 118 to 136 MHz range
Maximum Bandwidth	Any 5 %. Specify your Transmit and Receive frequencies in writing when ordering
Return Loss, VSWR	Better than -15 dB, < 1.5:1 across the bandwidth specified
Tuning	Factory
Gain	3 dBd
Maximum Power	250 Watts
Impedance (Nom.)	50 Ohms
DC Grounding	Yes
Polarisation	Vertical
E Plane	32°
H Plane	360° omnidirectional, ± 0.5 dBd
Cable Tail	None
Connector	N-Female connector located at the base of the mount tube
Height at lowest frequency 85 MHz	4.8 metres. At higher frequencies, the collinear antenna height reduces
Weight (Bare)	9 kg
Projected Area	0.14 m ²
Wind Load at 160 kph	17 kg, 0.170 kN
Mount Tube	48 mm diameter x 600 mm, aluminium
Mast Mount Clamps recommended	2 x UAM180L

UAM180L clamps are recommended for mounting the G12 collinear antenna to a round mast between 40 mm and 75 mm in diameter. These clamps are galvanised steel designed for heavy duty service.

For larger diameter masts up to 115 mm, UAM180UNI and UAM180UNIL parallel clamps are available.

