

Section 1

BASE STATION ANTENNAS

Updated 14 February 2011

UHF Omnidirectional Collinear Antennas

Frequency
520 – 960 MHz

Bandwidth
Any 1.5%



These high gain UHF omnidirectional collinear base station antennas are suitable for two-way radio systems operating within the 520 to 960 MHz frequency range.

Built to full commercial standard, the radiating elements are enclosed within a robust fibreglass radome providing full protection against harsh weather conditions and a long service life. Wind loading is minimal.

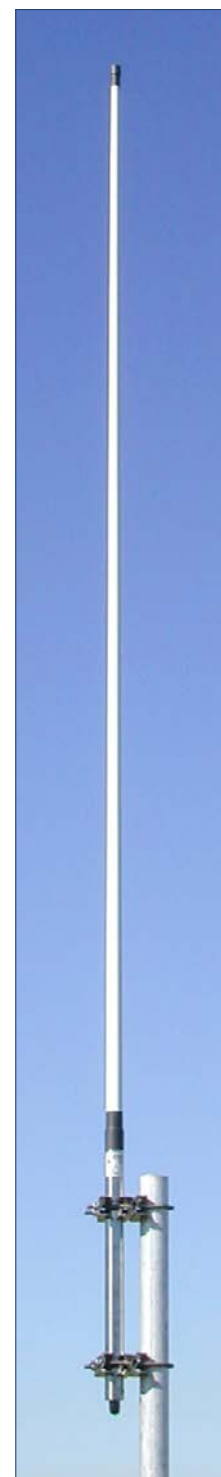
- The **G56** model delivers **6 dBd** gain.
- The **G59** offers the higher **9 dBd** gain.

Specify your transmit and receive frequencies within the 1.5% bandwidth limitation when ordering and your collinear antenna will be manufactured and tuned accordingly at better than 1.5:1 VSWR.

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

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

| SPECIFICATIONS | G56 | G59 |
|--|---|----------------------------|
| Construction | Aluminium internals and stainless steel mount tube Parallel fibreglass radome | Tapered fibreglass radome |
| Frequency Range | Suitable for use in the UHF frequency range 520 to 960 MHz | |
| Maximum Bandwidth | Any 1.5 % <i>Specify your Transmit and Receive frequencies in writing when ordering</i> | Any 1.5 % |
| Return Loss, VSWR | Better than -15 dB, < 1.5:1 across the bandwidth specified | |
| Tuning | Factory | Factory |
| Gain | 6 dBd | 9 dBd |
| Maximum Power | 250 Watts | 250 Watts |
| Impedance (Nom.) | 50 Ohms | 50 Ohms |
| DC Grounding | Yes | Yes |
| Polarisation | Vertical | Vertical |
| E Plane | 16° | 9° |
| H Plane | Both models are 360° omnidirectional, ± 0.5 dBd | |
| Cable Tail | None | None |
| Connector | N-Female connector located at the base of the mount tube | |
| Height at lowest frequency 520 MHz | 3 metres <i>At higher frequencies the collinear antenna height reduces</i> | 4 metres |
| Weight (Bare) | 1.8 kg | 2 kg |
| Projected Area | 0.060 m ² | 0.070 m ² |
| Wind Load at 160 kph | 7.0 kg, 0.066 kN | 8.4 kg, 0.083 kN |
| Stainless Steel Mount Tube Dimensions | 32 mm diameter x 500 mm | 32 mm diameter x 500 mm |
| Mast Mount Clamps recommended | 2 x EB1SS | 2 x EB1SS |



EB1SS clamps have all stainless steel components and are recommended to mount the **G56** and **G59** model collinear antennas parallel to a round mast between 20 mm and 50 mm in diameter.

Two clamps will be required.

