



Model

SGDB-T10

Ground independent, mast
mount, multiband mobile
phone antenna

Dualband 4G

825-890 &

1710-2190 MHz

6.2 dBi Gain

Recommended for Mast Mounting

- Dual mounts via a UB3-SS or EB1-SS - sold separately
- 10 metres of RG58 low loss stranded cable, bottom exit from mount section.
- SMA male connector fitted to the cable.

INSTALLATION

GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

Our SGDB-T10 dualband telemetry antenna is a popular choice due to:

1. Multiband coverage of all available carriers dualband **4G cellular** networks.
2. Effective performance with **6.2 dBi** gain.
3. Ground independent; no metal ground plane is necessary.
4. Modest size at 1.0 metre tall.
5. Robust construction ensuring a long service life.

A detailed specification sheet is available to download from www.zcg.com.au

TUNING

The SGDB-T10 dualband 4G antenna has been tuned in the factory to cover all available carriers upper and lower **4G** mobile phone networks combined. VSWR has been optimised to better than 1.6:1 across the full frequency range 825-960 MHz and 1710-2190 MHz.

This tuning cannot be altered.

SELECTING THE MOUNTING POSITION

The solid aluminium mounting section allows this antenna to be mounted in either a fixed location or mobile application utilise an appropriate mounting bracket such as our UB3-SS or EB1-SS.

The antenna does not come fitted with a vibration/movement allowance spring base, so the antenna is a static mounted antenna. Ensure installation location will not come into contact with any overhead infrastructure as the antennas radome will deform leading to breakage and complete failure of your antenna.

No metal ground plane is necessary for the antenna to operate effectively.

To achieve best performance from your antenna, these are the important principles you should consider when selecting the mounting point :

1. **Mount the antenna in as high a place as possible.**
2. **Mount the antenna as far away from other antennas and metallic objects as possible to avoid distortion of the 360° omnidirectional pattern and interference. At least 350 mm side clearance is desirable, preferably more.**
3. **Mount the antenna vertical, not at an angle.**

INSTALLATION TOOLS REQUIRED

- Mounting hardware for antenna securing - order separately
- Adjustable spanner for mounting hardware securing
- Cable ties for securing coaxial cable route
- Small cutters for cable tie excess removal
- Amalgamation tape and PVC tape for connector sealing

INSTALLATION GUIDE

IMPORTANT : Leave some slack in the cable at the point where the cable exits the mounting handle.

Ensure that the cable is not stretched excessively and there are no sharp kinks. Use cable ties, but do not pull so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

The cable may be cut shorter if desired. However, a new connector will then need to be fitted using proper tools.

SEALING CONNECTIONS

For all locations/environments, it is vital that all connections be well sealed with at least two layers of self-amalgamating tape to prevent ingress of moisture followed by a top layer of UV stabilised PVC tape. PVC or electrical tape by itself will not be adequate as this will not seal your termination.

Relying solely on the internal connection seal is not recommended as long-term degradation of the seal will allow water/debris ingress into your connection, resulting in failure of your antenna system.

Installation is now complete.

MAINTENANCE

This antenna has been designed and constructed of the highest quality components and manufacturing processes for high reliability and low maintenance requirements.

We recommend that you conduct a routine annual mechanical inspection of the antenna, feeder cable and connections to ensure operational capability of your entire system.