

# ANTENNA DESCRIPTION

This GCRFA antenna will provide transmit and receive improvement for these frequency applications :

- ✓ 4G LTE
- ✓ 4G & 3G all networks dualband mobile phone
- ✓ L1 GPS global positioning system -1575.42 MHz.
- ✓ WiFi/WLAN 2.4 GHz and 5.8 GHz.

RG174 feed cables bottom exit through the base and are terminated with SMA male or specified terminations. Each lead is labelled for ease of identification/connection.

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



# TUNING

The antenna has been tuned in the factory to cover the operating frequency ranges for LTE, dualband 4G/3G mobile phone networks, L1 GPS and WiFi at 2.4 GHz and 5.8 GHz.

### This tuning cannot be altered.

## SELECTING THE MOUNTING POSITION

100mm in diameter, this compact antenna can be secured into any hole or bracket with a minimum 20mm diameter hole using the 28mm long bottom thread and screw nut.

No metal ground plane is necessary for the antenna to operate effectively. Potential mount positions therefore include vehicles and numerous fixed locations where no metal exists.

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.
- Mount the antenna as far away from other antennas and metallic objects as possible to avoid interference and distortion of the 360° omnidirectional pattern. At least 350 mm side clearance is desireable, preferably more.

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# INSTALLATION GUIDE

Remove the screw nut from the threaded base, slip it down the feeder cables and over the connectors.

Pass the feeder cables through the mount hole or bracket.

Thread the screw nut back up the cables and onto the threaded base.

From underneath, tighten the screw nut to secure the antenna firmly in position.

#### *IMPORTANT* : <u>Leave some slack</u> in the cables at the point where the cables bottom exit the threaded base so as not to place unnecessary tension on the cables.

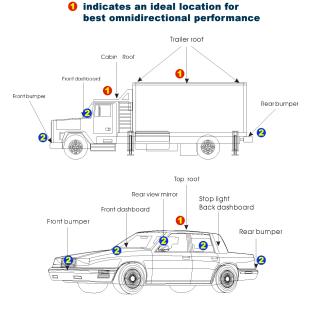
Route each of the RG174 cables carefully to your mobile phone device, GPS and/or Wi-Fi device. Ensure that the cables are not under any tension and there are no sharp kinks.

Use cable ties, but do not over-tighten as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance or complete failure.

Note that each cable is labelled. Insert the SMA male connectors into each device as appropriate.

The maximum input power rating is 25 watts.

Installation is now complete.



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