

ANTENNA DESCRIPTION

The **SGL3500** antenna is factory tuned for the C-band 5G N78 mobile phone network utilising 3.4-3.6 GHz.

With 6 dBi gain, the SGL3500 5G cellular antenna will deliver consistent and dependable results with maximum efficiency, particularly where signal strength is marginal.

The stainless steel spring and fibreglass radome stands 40 cm tall.

A range of brackets are available to suit various mounting positions.

8 metres of RU240-UF low loss, ultra flexible, stranded core coaxial cable bottom exits through the spring base. A SMA male crimp connector is fitted as standard.

A SMA female to FME female adaptor is supplied for alternate termination devices.

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 N78 C-band 5G mobile phone network. VSWR has been optimised to better than 1.6:1 across the full frequency range 3400-3600 MHz.

This tuning cannot be altered.

SELECTING THE MOUNTING POSITION

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

Typical mounting positions for this antenna are to your vehicle bull bar or guard, the boot of a sedan or truck mirror using the appropriate bracket with a 16 mm diameter hole minimum.

The antenna can also be mounted in locations other than on a vehicle.

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.
- 3. Mount the antenna properly vertical, not at an angle.

INSTALLATION TOOLS REQUIRED

- 16mm drill bit for mounting hole of spring base (if required)
- 22mm spanner for base 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

Remove the nut and washer from the threaded base and slip them off over the cable. Pass the cable through the hole of your mounting bracket. Next thread the washer and then the nut back up the cable and onto the threaded base. From underneath, tighten the nut to secure the antenna firmly to the bracket.

IMPORTANT : <u>Leave some slack</u> in the cable at the point where the cable exits through the spring base. This will allow the antenna to flex in the usual manner during travel.



Route the RU240-UF low loss, ultra flexible, stranded core coaxial cable carefully. Avoid high heat areas in the engine bay. 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.

Insert the connector into your mobile phone or mobile device. The maximum input power is 30 watts.

Installation is now complete

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

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