



# ZN3-SGDB-11

Model  
Heavy Duty Detachable  
Cellular Antenna  
1.2 metres tall

GSM, Next G, 3G & 4G  
6.2 dBi Gain

## Recommended for a vehicle bull bar

- Mounts into any bracket with minimum 12.7 mm (½") diameter hole.
- 5 metres of RG58A/U stranded cable with FME Female connector fitted.
- 100 watts maximum input power.

## INSTALLATION GUIDE

[www.zcg.com.au](http://www.zcg.com.au)

### ANTENNA DESCRIPTION

**Standing 1.2 metres tall and delivering an effective 6.2 dBi gain, the ZN3-SGDB-11 heavy duty detachable cellular antenna offers a good balance between size and gain which is well suited for either hilly or flat country.**

Specifically designed for mounting to a vehicle bull bar, the high quality robust construction will survive harsh Australian conditions long term. Key features include :

- The antenna top can be detached for storage when not required using the Allen hex key supplied.
- A precision machined marine grade aluminium ferrule prevents water and dust ingress giving the antenna a longer service life.
- The machined aluminum top cap stops water and dust ingress into the radome.

A detailed specification sheet is available to download from our website [www.zcg.com.au](http://www.zcg.com.au)

### TUNING

The antenna has been tuned in the factory for GSM, Next G, 3G and 4G cellular networks. VSWR has been optimised to less than 1.6:1. This tuning cannot be altered.

### MOUNTING POSITION

The typical mounting position for this antenna is to your vehicle bull bar. The height and weight of this antenna make mounting to the guard, boot or mirror not practical.

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

To achieve best performance, 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 desirable, preferably more.

### INSTALLATION KIT

The installation kit provided with the antenna includes :

- 1) Spring base assembly with 5 metre cable and FME Female connector fitted.
- 2) 3 mm Allen Hex Key to secure and/or remove the antenna top when not required.
- 3) PVC cap to cover the exposed UHF female connector on the spring base whenever the antenna top has been removed.
- 4) 6 x 100 mm cable ties, 2 x 200 mm cable ties.

### INSTALLATION GUIDE

The stainless steel spring base can be fitted into any bull bar bracket with a minimum 12.7 mm (½") diameter hole.

5 metres of RG58A/U stranded cable bottom exits through the spring base. An FME female connector is fitted to the cable to make connection to your Cellular device very simple.

- 1) Remove the split nut from the barrel spring.
- 2) Pass the FME connector and cable through the hole of your bull bar mounting bracket.
- 3) Screw the split nut back on to the spring and tighten from underneath to secure the antenna firmly to the bull bar bracket.
- 4) **IMPORTANT : You must leave some slack in the cable at the point where the cable bottom exits through the spring.**

Leaving a stress relief loop in the cable will permit the antenna to flex in the usual manner during travel, without placing unnecessary tension on the cable.



**Failure to follow this advice will most likely result in the feeder cable being ripped out of the antenna . The issue is not covered under warranty.**

- 5) Route the antenna feeder cable carefully to your cellular device. Ensure that the cable is not stretched excessively and there are no sharp kinks.  
Do not pull the cable ties so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.
- 6) Neatly coil any excess cable and secure out of sight.
- 7) Screw the FME female connector fitted to the cable into the FME Male to UHF Male adaptor provided

**8) Installation is now complete.**