



Model

CT150

Low Profile, Rugged and
Covert, VHF Satellite
communications and GPS
Antenna

VHF Satellite communications:
Rx 137-138 & Tx 148-150.5MHz
L1 GPS: 1575.42 MHz

- 6 stainless steel M6 x 20mm mounting bolts supplied.
- SMA Male connectors fitted.

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

CT150 is a low profile, rugged and covert VHF Satellite communications and L1 GPS antenna.

Radome enclosed, this model is the ideal choice in situations where a traditional long whip would be vulnerable to damage or vandalism.

Constructed from a PCV radome and aluminium, the antenna measures 610mm long, 125mm wide and 85mm high.

Typical applications suited for this low profile antenna include :

- | | |
|----------------------------|-----------------------------|
| ✓ Trains | ✓ Police |
| ✓ Buses | ✓ Ambulance |
| ✓ Forklifts | ✓ Fire Brigade |
| ✓ Tractors | ✓ Emergency Services |
| ✓ Forestry Vehicles | ✓ Security Services |
| ✓ Logging Trucks | ✓ Mining |

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

SELECTING THE MOUNTING POSITION

The typical mounting position for the antenna is as high on your vehicle, structure or tower as possible ensuring no obstructions around the antenna..

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 interference and distortion of the 360° omnidirectional pattern. At least 500mm side clearance is desirable, preferably more.**

INSTALLATION GUIDE

Drill 4 x 8mm holes in the mounting surface suitable for the 4 x M6 x 20mm bolts.

The SMA Male connectors exit the rear of the antenna to allow your connection to be easily connected to your coaxial cable to your device.

The MIL-SPEC RG58 Low Loss cable should be attached to your satellite communications device and the RG174 A/U cable should be connected to your GPS device. Both cables are labelled.

Ensure a water-proofing layer of amalgamation and then a layer of PVC electrical tape is applied to the terminations to reduce possibilities of water ingress, shortening the life of your antenna system.

TUNING

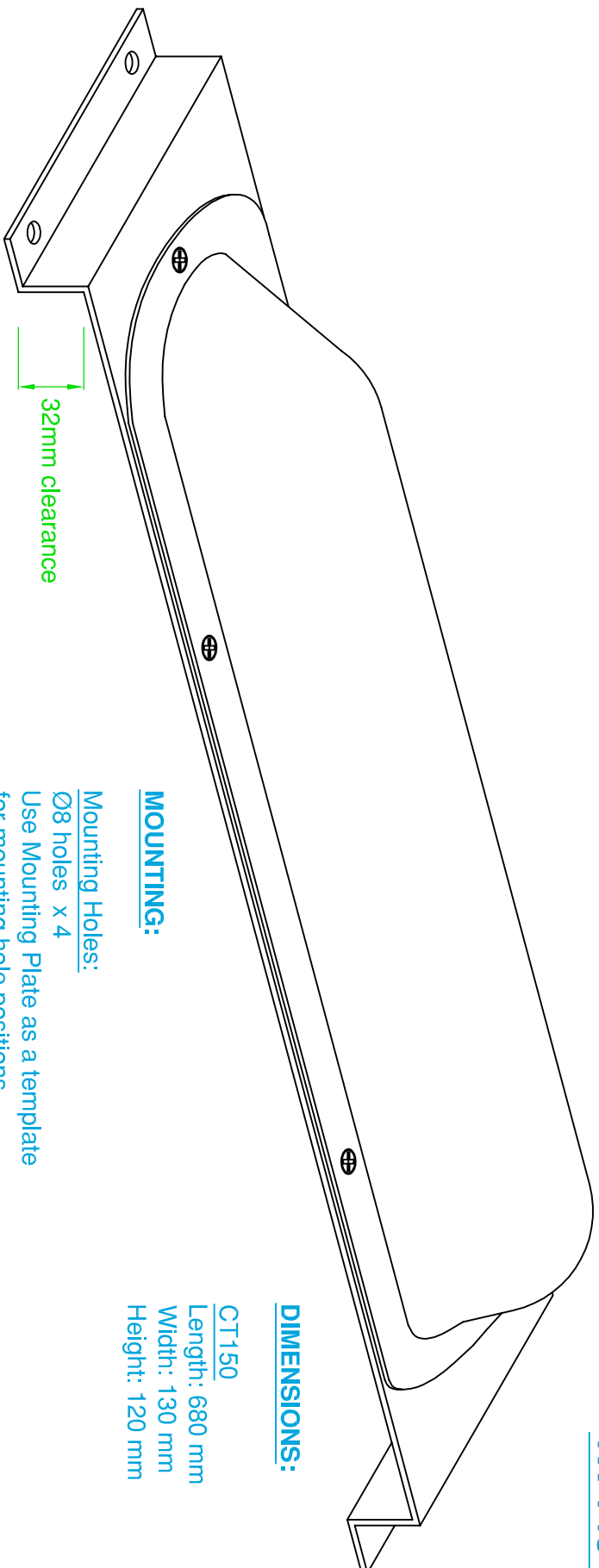
The antenna has been specifically tuned to both VHF satellite radio-navigation/ communications Receive (Rx) 137-138MHz, Transmit (Tx) 148-150.5MHz and L1 GPS 1575.42MHz. **No further tuning is required.**

MAINTENANCE

The CT150 is constructed of robust UV rated external materials and high quality internal radiating components with foam supports to ensure a long, reliable with minimum maintenance service life.

We recommend a full system visual inspection of your antenna, mount base, coaxial cable route and termination security yearly to ensure your system is performing adequately. A regular check of your device performance should also be undertaken as per the manufacturers guidance.

**FREQUENCY: GPS &
RX 137 - 138 MHz
TX 148 - 150.05 MHz**



DIMENSIONS:

CT150
Length: 680 mm
Width: 130 mm
Height: 120 mm

MOUNTING:

Mounting Holes:
Ø8 holes x 4
Use Mounting Plate as a template
for mounting hole positions.
32mm clearance

Fasteners (not-supplied):

Connectors & Cable:
GPS: SMA Male
- thin Cable Tail 4.5 metres
Orbcomm: SMA Male
- thicker Cable Tail 4.5 metres

**CT150
Low Profile Antenna**

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