



Installation Instructions

GPSCO Series

SW3-567 - v2

1. Introduction

The GPSCO Series is a range of internal mount LTE/Cellular, dual band WIFI and GPS/GNSS antennas. The standard GPS/GNSS LNA gain is 26dB.



Electrical Safety Note

This product contains an active GPS/GNSS antenna (part number SR8-HG26-04FJ). Rated voltage: 3-5VDC Rated current: 20mA maximum. **The supply to this device must be provided with overcurrent protection of 1A maximum.**

2. Mounting Requirements and Selecting Location

The GPSCO antenna is designed to be fitted on or under a vehicle dashboard, located as far forward as possible to optimise view to the sky. When fitting under the panel, a position should be selected to ensure there is no metal close to the antenna inside the panel.

The optimum orientation for the antenna is to be fitted flat with the UP side facing towards the sky. It can also be fitted on or under any other non-metallic panel in a position that allows adequate view of the sky to enable satellite acquisition.

The antenna can be fitted to a vehicle window, but it is important to note that GPS/GNSS performance will be reduced on a window that has a small angle of incline or is vertical. The UP side must be facing the outside of the window.

Note that the antenna should not be fitted to a fine wire mesh type heated window or heat reflective type glass. The antenna location should ensure that the front curved face of the antenna is a minimum 10cm (2") away from any metal structure.

The antenna must not be fitted adjacent to or in near proximity of one of the vehicle electronic control units (ECU).

3. Mounting the Antenna

Note: It is recommended that the installation is carried out when the temperature is over 50°F (10°C) as the ideal temperature for the adhesive pad bonding is 70°F (21°C) to 100°F (37°C).

Before fitting, ensure that both the antenna face and mounting surface are clean and free of grease – use the supplied alcohol swab and allow the cleaned surfaces to dry before fitting the adhesive pad. (on the correct side, to ensure the UP side is facing the sky) and apply adequate pressure to adhere.

Remove the protective backing from the antenna pad, position the antenna and apply adequate pressure to ensure that it has adhered correctly.

4. Routing and Terminating Coaxial Cable(s)

Route the coaxial cables away from the antenna, taking care that the cables do not apply stress to the antenna mounting. Observe a minimum bend radius of 25mm when installing the CS29 (Cell/LTE) and CS32 (WiFi) cables. The cables should be routed so that they do not interfere with any moving vehicle components.

The cables must not be routed in front of any airbag devices – note that these may be located behind the windscreen pillar trim and the side of the roof head lining, depending on vehicle specification.

5. Commission and test

Check LTE/Cellular and WiFi cable(s):

- Carry out VSWR check both feeds should measure <2.5:1.

Check GPS/GNSS cable:

- Check the GPS/GNSS cable with DC to measure high resistance.
- Connect the cable to the GPS/GNSS receiver and check for satellite acquisition.

6. Notices



European Waste Electronic Equipment Directive 2002/96/EC

Please ensure that your old Waste Electricals and Electronics are recycled do not throw them away into standard waste.



RoHS 3: Directive 2015/863/EU and its subsequent amendments. Homogeneous materials composing parts that are compliant with this legislation have less than 0.1% by weight each of lead, mercury, hexavalent chromium, PBB, and PBDE, and 0.01% by weight of cadmium. Exemption 6.c applies to this product.

EU Declaration of Conformity (RED)

Object Reference: GPSCO Series

Object Description: Low Profile MiMo Antenna with active GNSS Antenna

Manufacturer: Panorama Antennas Ltd 61 Frogmore, London, SW18 1HF, U.K.

This declaration is issued under the sole responsibility of the manufacturer

The object of the declaration described above is in conformity with the relevant Union Harmonization Legislation below:

Directive 2014/53/EU Radio Equipment Directive (RED)

Harmonised Standards and References:

EN 301 489-1 (V2.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements".

Referencing EN 61000-4-2:2009 – Electrostatic Discharge Immunity and EN 61000-4-3:2006 +A1:2008 +A2:2010 – Radiated RF Immunity

EN 300 440-1 V1.6.1 (2010-08) – Electromagnetic compatibility and radio spectrum matters (ERM); short range devices; radio equipment to be used in the 1GHz to 40GHz frequency range; Part 1: Technical characteristics and Test methods in accordance with EN 300 440-2 V1.4.1 (2010-8) - Electromagnetic compatibility and radio spectrum matters (ERM); short range devices; radio equipment to be used in the 1GHz to 40GHz frequency range

Low Voltage Directive: Directive 2006/95/EC (Electrical Equipment designed for use within certain voltage limits) of August 2007. Compliance is declared according to:

EN62368-1: 2014 Audio/video, information and communication technology equipment. Safety requirements.

Waiver: This document represents information compiled to the best of our present knowledge. It is not intended to as a representation or warranty of fitness of the products described for any particular purpose. This document details guidelines for general information purposes only. Always seek specialist advice when planning installations and ensure that antennas are always installed by a properly qualified installer in compliance with local laws and regulations.