

Mounting Instructions

WMMGG-7-27

SW3-687 - Document Version 1.0

Introduction

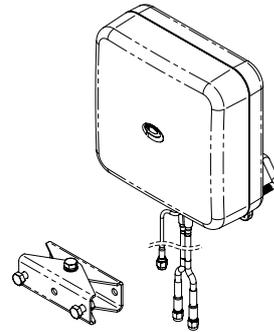
The WMMGG-7-27 is a MiMo 2G/3G/4G antenna incorporating an integrated active GPS/GNSS antenna.



Electrical Safety Note

This product contains an active GPS/GNSS antenna (part number SR8-HG26). Rated voltage: 3-5VDC rated current: 20mA maximum.

The supply to this device must be provided with overcurrent protection of 1A maximum.



1. Select Position

For a good installation the antenna should be directed towards the strongest network signal. In order to achieve this follow the guide below.

- Connect the antenna to your data card or modem with the antenna adapter and coaxial cable provided.
- Ensure that your device is connected to the network and displaying the signal strength indicator.
- With the antenna at selected location, rotate it in approximately 45 degree steps – in each position, you may need to wait for up to one minute to allow the signal strength indicator to update.



Note

Signal strength indication may be displayed either: **a.** Graphically with bars, (where more bars is a better signal), or **b.** As a signal level value in dBm (e.g. -80) - in this case, the lower the negative number, the better the signal, (i.e. -71 is stronger signal than -83).

The GPS/GNSS antenna requires the antenna to maintain the correct vertical orientation (with cables at the base) and the antenna should be mounted so that the GPS/GNSS antenna located at the top of the antenna housing has a clear and un-obstructed view of the sky.

2. Mounting the Antenna Externally

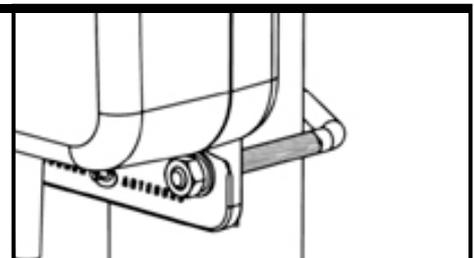
Ensure that the selected mounting location can be safely accessed with the equipment that you have available and mount the antenna so that it has at least 1 metre (3.3') of clearance from all obstructions if possible. The antenna should not be mounted directly on to metal walls or backing on to metal masts or poles. If the antenna must be mounted to such a surface it must be mounted at the lip of the roof or the very top of the pole such that the body of the antenna is elevated clear of the metal surface. To maintain GPS/GNSS performance the antenna should not be mounted under roof structures or overhangs.

A. Mount the antenna

The antenna is supplied with weatherproof mounting hardware for wall or mast mounting and should be fitted with the cable entry at the bottom.

Mast Mounting

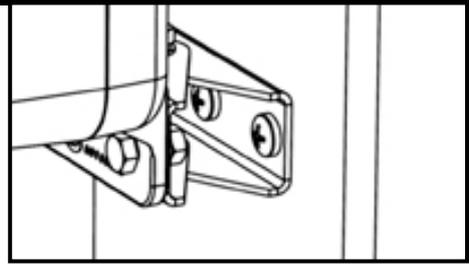
The clamp assembly allows fitting to masts of between 20-50mm (0.8" – 2") diameter.



2. Mounting the Antenna Externally (Cont'd.)

Wall Mounting

The wall mount bracket can be used to mount the WMM antenna to walls or other secure flat surfaces. Suitable screws and wall plugs (if required) should be sourced locally.



B. Secure the Antenna In Place and Waterproof Exposed Connections

Fully tighten the mounting hardware. If exposed the RF connector joint should be waterproofed with a weatherproof electrical tape (self amalgamating type is recommended) allowing a significant overlap of each turn and ensuring that the overlap is in the opposite direction to predicted water fall.

3. Notices



RF Safety Note

Ensure that the antenna is mounted in such a way that no person is likely to be within a distance of 30cms (12") from the antenna during use.



RF Safety Note

Ensure that the antenna is used only as supplied the co-axial cables should not be cut shorter or otherwise modified.



Electrical Caution

Parts of this antenna are an electrical conductor. Contact with power lines can result in death or serious injury. The antenna and supporting mast must not be close to any power lines during installation, use or removal. If the antenna is elevated and at risk from lightning strike it must be ensured that the antenna is mounted and earthed appropriately by a trained professional in accordance with the relevant standards.



European Waste Electronic Equipment Directive 2002/96/EC

Please ensure that your old Waste Electricals and Electronics are recycled in accordance with the regulations. Please do not throw them away with your domestic rubbish as they will not be recycled.



RoHS 2: EU RoHS compliance is declared per **Directive 2011/65/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. In situations where an exemption applies, the preceding limits, corresponding to the exempted substance(s), may be higher.

R&TTE: DIRECTIVE 1999/5/EC of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity. Compliance is declared according to:

EN 301 489-1 V1.9.2 – Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements - **Referencing EN 301 489-3 V1.6.1** and **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; Part 2: Harmonised EN covering the essential requirements of article 3.2 of the R&TTE Directive.

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

EN60950-1: Safety of information technology equipment – according to test specification EN 60950-1:2006 +A11:2009 +A12:2010 +A12:2011.

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.