



# Installation Instructions

## LPBEM-6-60 Magnetic Mount Antenna

SW3-217 - v2

### 1. Introduction

The LPBEM-6-60 antenna range covers 2G/3G/4G and 5G sub 6GHz frequency bands (617-960/1710-6000MHz). The antenna is supplied with an integrated magnet for adhering to steel / panels or enclosures which will provide a counterpoise/ground plane for the antenna. The antenna can also be located on an aluminium panel, which will provide a ground plane/counterpoise, but not magnetic adhesion. If the antenna is placed on a non-conductive surface such as a desk top, the performance will be impaired, particularly at lower frequencies due to the absence of a ground plane.

The antenna is supplied with an integral RG174 coaxial cable and is available with a variety of lengths and connectors available.

### 2. Mounting requirements and selecting location

Select a mounting location - this location should be flat and clean for maximum magnetic retention. If the magnet is being used to retain then the mounting panel must be a ferrous metal.

If fitted to a vehicle, a maximum speed of 160kmph / 100mph should be observed. and the antenna location should be selected to reduce the chance of impact from overhead obstructions, which could dislodge or damage the antenna.

Measure to check for central position if applicable. If the antenna will be co-located with other antennas or equipment try to ensure at least 30cm (1') of clearance around the antenna in order to avoid de-tuning and interference issues.

### 3. Antenna Mounting

Clean the mounting panel with an alcohol swab and allow to dry. Place the antenna flat on the mounting panel. If the antenna needs to be moved or re-located, use the body of the antenna - Do Not hold, carry or remove the antenna by using the coaxial cable.

### 4. Routing and Terminating Coaxial Cable(s)

Route the coaxial cable to the equipment, taking care to avoid running adjacent to any existing wiring or fouling any moving components. Be careful to observe the minimum bend radius which is 12mm (1/2") for RG174 cable.

### 5. Commission and test

- Carry out VSWR check, the VSWR should measure <2.5:1 in transmit band
- Connect the cable to the cellular device and check operation

### 6. Notices



#### DO NOT

- operate the transmitter when someone is within 20cm (8") of the antenna.
- operate the equipment in an explosive atmosphere.
- attempt to install the antennas without the proper safe equipment to access the install location.
- install the antenna in such a way that it may fall, or be knocked off and cause injury.
- exceed 160Kmph (100Mph) if mounting to a vehicle.
- hold, carry or de-install the antenna using the cable.
- chew parts or put them in mouth, keep away from unsupervised children.

**European Waste Electronic Equipment Directive 2002/96/EC**

Waste electrical products should not be disposed of with household waste. All electronic products with the WEEE logo must be collected and sent to approved operators for safe disposal or recycling. Please recycle where facilities exist. Many electrical/electronic equipment retailers facilitate "Distributor Take-Back scheme" for household WEEE. Check with your Local Authority or electronic retailers for designated collection facilities where WEEE can be disposed of for free.

**Directive 2011/65/EU (RoHS 2)**

**RoHS 2** compliance is declared per Directive 2011/65/EU and its subsequent amendments with exemption 6.c applied.

**REACH** (Registration, Evaluation, Authorisation and Restriction of Chemicals, EC 1907/2006)

This product contains Lead (CAS No. 7439-92-1) which is classified as an SVHC (Sub- stance of Very High Concern) as being toxic to reproduction under Article 57c. of REACH. **Do not chew parts or put them in mouth, keep away from unsupervised children. Dispose of parts as WEEE waste do not send to landfill.**

**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.