Installation Instructions
LPW-UHF- UHF IOT Antenna

SW3-193- Document Version 1

A. Introduction

This wall / panel mount antenna covers UHF frequencies including 433 and 460 MHz depending on variant. The antenna can be mounted directly to a panel using screws or the supplied adhesive pad. The antenna is supplied with fitted RG178 cable (which is thin enough to pass through some enclosure seals allowing installation without a hole being drilled) and is available with a variety of connectors.

B. Mounting requirements and selecting location

The antenna should normally be placed in a vertical orientation, with the cable exit at the top or the bottom. The antenna should be spaced a minimum of 30cm (12") from any nearby metal structure if possible. When fitting on a device enclosure/housing, ensure that there is adequate under panel clearance from internal components and that the coaxial cable can be routed to the equipment.

C. Antenna Mounting

The antenna can be secured with the supplied adhesive and by using additional screw holes if required. When fitted with a miniature connector (SMA plug or smaller), it is possible to pass the cable through the rear of the antenna plate to conceal the cable exit.

If the cable will exit above the panel, select a suitable breakout hole and remove the plastic using pliers, ensuring a smooth edge is created. The cable must be routed directly away from the antenna and not run alongside it, which may determine which cable exit is utilised.

Note: It is recommended that the installation is not carried out if the temperature is less than 50°F (10°C) as the ideal temperature for the pad bonding is 70°F (21°C)to 100°F (37°C).

The adhesive pad can be used as a drilling template if required, fixing holes are 5.5mm (0.21") and cable entry requires 10mm (0.4") clearance for an SMA plug. After drilling holes, check that any burs or swarf are removed, to ensure a flat sealing surface for the adhesive pad. With the cable in the correct exit position, remove the backing from pad and apply firmly to the antenna base. Clean the mounting panel with alcohol swab and allow to dry. Remove backing tape, position correctly and press antenna firmly to the mounting panel.

D. Routing and terminating coaxial cable(s)

Route the coaxial cable to the device, ensuring that the cable is secured and protected from subsequent damage during access. If cable ties are used, they should not be overtightened, as this will distort the cable profile and could affect the antenna performance. Any excess cable should be laid "side by side" (not coiled) and can be secured by cable ties or tape.

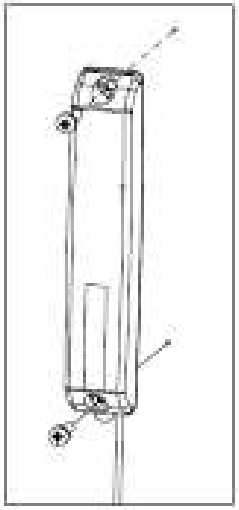
E. Commission and test

Check the comms cables:

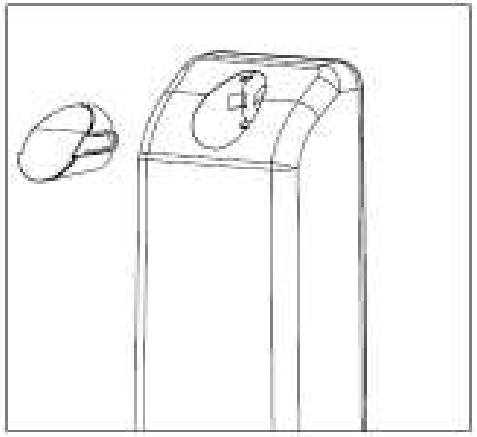
- Carry out VSWR check, the VSWR should measure <2.5:1 in transmit band.
- Connect the cable to the radio device
- Seal the connector interface, as required

INSTRUCTIONS FOR LPW

INTERIOR MOUNTING

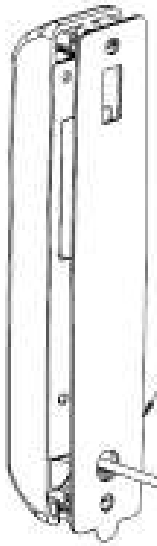


(1) ALIGN ANTENNA WITH WALL AND USE SCREWS PROVIDED TO ATTACH TO THE WALL. (USE OF ADHESIVE PAD IS OPTIONAL ON INTERIOR WALLS.)

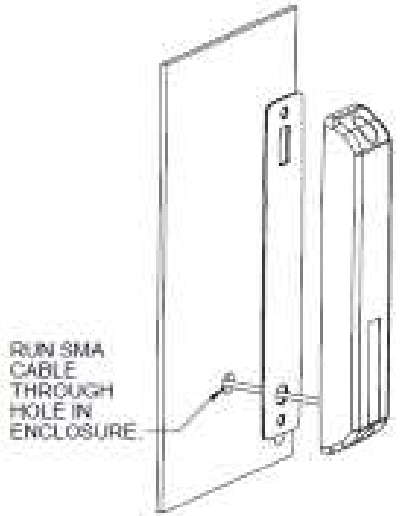


(2) ONCE THE ANTENNA HAS BEEN SCREWED ONTO THE WALL, PUSH THE LOOSE SNAP FIT HOLE COVERS INTO THE TOP AND BOTTOM SCREW HOLES.

FOR INVISIBLE MOUNTING

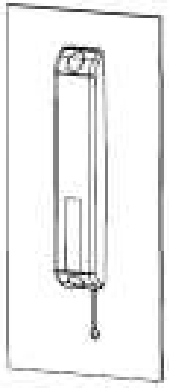


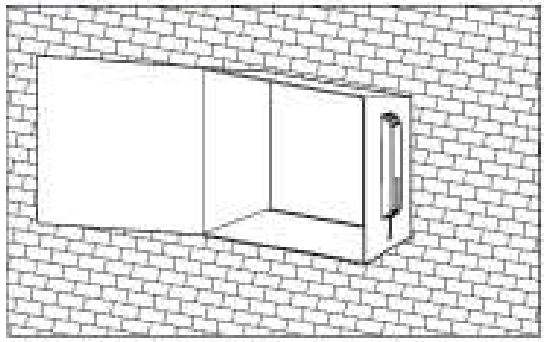
(1) FEED SMA CABLE THROUGH DESIGNATED HOLE IN SEALING PAD AND STICK PAD TO BACK OF ANTENNA.



(2) RUN SMA CABLE THROUGH HOLE IN ENCLOSURE AND FOLLOW THE STEPS FOR INTERIOR INSTALLATION. (ENSURE ADHESIVE PAD IS USED WHEN PERFORMING AN EXTERNAL INSTALLATION.)

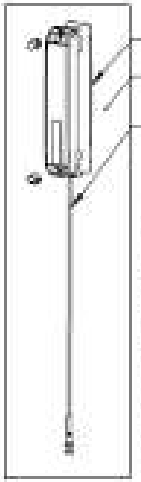
EXTERIOR MOUNTING





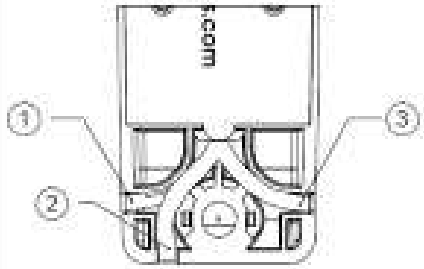
(1) FOR EXTERIOR WALL MOUNTING AND METER BOX INSTALLATIONS USE STEP 1 & 2 FROM INTERIOR MOUNTING BUT MAKE SURE THE ADHESIVE PAD IS USED FOR SEALING PUPOSES. SMA CABLE CAN BE RUN DOWN THE BACK OF THE METER BOX OR OUT THROUGH AN EXIT HOLE.

NO SCREW MOUNTING



(1) THE ANTENNA CAN BE ATTACHED STRAIGHT TO THE WALL USING ONLY THE ADHESIVE PAD. ONCE IN POSITION PUSH SNAP FIT COVERS INTO POSITION TO BLOCK OFF ACCESS TO SCREW HOLES.

CABLE ROUTING OPTIONS



(1) THERE ARE 3 ROUTING OPTIONS SHOWN ABOVE. ONCE THE DESIRED ROUTE HAS BEEN CHOSEN, SNAP THE SMALL PLASTIC BREAKOUT HOLE SO CABLE CAN RUN FLUSH.

G 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.
- chew parts or put them in mouth, keep away from unsupervised children. Dispose of parts as WEEE waste do not send to landfill.

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 (Substance 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 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.