



Installation Instructions SEC5410 & SEC5413 Series Antennas

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Thank you for buying a PacSat Microwave antenna. This product is the result of more than 10 years microwave experience, ongoing research and development. When correctly installed and operated, it will give you many years of trouble-free service. This antenna has been fully tested before it left our factory.

1. Orientation and Polarisation

Select an installation site that enables the antenna to be orientated to provide the desired coverage area. The SEC5410 and SEC5413 series of antenna are designed for vertical mounting and vertical polarization. Ensure that all other antennas using the sector antenna are also vertically polarized.

2. Mounting Options

- Clamp to 44mm-57mm diameter masts using the U-bolts provided
- Clamp to masts of less than 44mm using the U-bolts and V-blocks provided
- Bolt to a flat surface such as a wall or panel using suitable bolts or screws (not provided). The mounting centres are 70mm horizontally. Shims may be used to compensate for non-vertical mounting surfaces.



3. Beam Tilt

- Standard antennas are supplied with -1° electronic beam tilt. For all mounting options ensure that the antennas are installed vertically to achieve optimum sector coverage. Please note that side-lobes and gain from the antenna outside the -3dB beam width are usually sufficient to provide good coverage close in.
- Additional negative and positive beam tilt can be obtained by fitting the optional Tilt Kit (AMB3341)
- For surface mounting, additional beam tilt can be obtained by fitting shims under the appropriate mounting tabs to obtain required alignment. Shims of 12mm thickness change the tilt angle by $1.7^{\circ} / 2.5^{\circ}$ on models 5410/5413 respectively.

4. Installation

- Connect a 50 Ohm transmission line with N-male connector to the antenna base.
- If using self-vulcanising tape to moisture-proof the coax connector, ensure that the pressure equalizing vent in the antenna base is not obstructed.
- Leave a strain relief loop in the transmission line before fixing the line at regular intervals. This will avoid cable stretch and strain on the end connector.
- Re-check antenna orientation before tightening all mountings securely.