

Sectoral Horns

Series 244 / 245

Features

- **Low Cost**
- **High Performance**
- **Customised Designs Available**
- **Greater Spectrum Efficiency**
- **Manufactured from Brass or Aluminium**
- **E or H Plane Available**
- **Quotations on Request**

The use of the sector antenna has become a very effective method of achieving the broadcast type of coverage required of the base station transmission system as used in LMDS/MVDS systems.

Flann Microwave has developed a series of compact, high performance, low cost sectoral hub antennas for LMDS/MVDS applications. The 64° azimuth beam angle is designed to provide the best circular coverage pattern when illuminated from the circle edge taking into account path losses and attenuation due to rain.

Sectoral Antenna v Omnidirectional Alternatives

More revenue potential per base station

Omnidirectional antennas are always located at the centre of the coverage area whereas sectoral antenna base stations can be located anywhere on the cell edge and can therefore illuminate up to 4 cells from one base station allowing a 4:1 ratio of revenue generating cells to cost generating transmitter sites.

Customised Base Station Antennas

The requirement to serve a number of small areas from a single base station has resulted in the development of the multiple beam technique, for which the sectoral antenna is ideal. Power splitting is through the use of branch guide couplers whilst polarization and direction orientation can be achieved using compact waveguide bends and twists.

Customised Foot Prints

A multiplicity of elements and arrays can be incorporated in a single enclosure to provide a defined radiation pattern. Edge fed circular and centre fed circular are possible configurations.

Customised Antenna, Filter and Splitter Assemblies

Assemblies of antenna elements fitted with purpose designed filters fed via two or three way power divider networks can be designed and manufactured to suit the special needs of individual applications. The arrays and the elements within each array can be positioned either prior to, or after installation to enable fine tuning.

Model 24244



Simple and compact design

The design and manufacture of omnidirectional antennas at millimeter wave frequencies is both complex and costly whereas the sector antenna and in particular the 64° sector antenna is a simple device offering **much lower manufacturing costs**.

Customised Antenna Enclosures

In order to be sure of a design which does not in any way compromise system performance, it is important to give careful considerations to all aspects of the antenna radome assembly and its integration with the transmitter. Flann can provide efficient, practical and individually customised solutions to your transmitter construction which minimize installation, servicing and system running costs while assuring you of the system's durability and high performance in all conditions.