Quad Sector Tx

Switchable Sector ENG Transmit Antenna

Applications

- Digital Electronic News Gathering

Features

- Optimizes the advantages of both an omni-directional antenna and a high-gain steerable antenna for digital COFDM newsgathering systems
- Four 90-degree sectors with dipole arrays within a single radome
- High gain & lightweight
- 16 dBi gain
- 1.99-2.50 GHz
- Completely encapsulated in non-conductive radome to minimize risks associated with high voltage lines
- Five-way RF switching can accommodate an external omni-directional antenna
- Can be deployed without Pan & Tilt and mast for substantial cost and weight reduction
- Quickly deployed for ease of set-up
- Size: 44" high x 7" diameter
- Weight: under 15 lbs.
- Vertical polarization

Overview

The new MRC Quad Sector is a specialized high gain transmit antenna for the most demanding applications. MRC's exclusive "shot finder" technology gives you a more focused energy yet having the flexibility of wider beam widths, offering greater efficiency over traditional omni-directional or high gain steerable antennas.

The new MRC Quad Sector antenna has been designed primarily for ENG applications where digital COFDM systems are employed. The high-gain, lightweight antenna integrates four multi-element phased arrays, each with 90-degree azimuth beamwidth, all within a single enclosure. Any of the four sectors can be selected by the ENG operator from a simple control panel located within the vehicle.

The antenna is completely housed in a non-conductive radome enclosure minimizing the dangers from high-voltage lines. The antenna design is highly reliable with a reduction of moving parts and minimal electronics using field-proven PCB-mounted RF switching. The antenna can be mounted on top of the ENG vehicle with a simple actuator to raise or retract the antenna to reduce height clearance when traveling.

The MRC Quad Sector antenna offers some major advantages over traditional transmit antennas. The MRC Quad Sector is used as an alternative to a steerable antenna eliminating the need for a telescoping mast and Pan & Tilt Unit. This can be a real advantage for small SUV-style ENG vehicles, and Dual-mode ENG/SNG trucks where reducing weight is important.

To save time when setting up for a live news story, the operator can select the sector that gives him the optimal signal, without having to aim the antenna or be concerned with the position of the vehicle.

MICROWAVE RADIO COMMUNICATIONS

SPECIFICATIONS

ELECTRICAL

Frequency: ..... 1.99 – 2.50 GHz
Polarization: ..... Vertical
Gain, dBi ..... 16.0 dBi (nominal)
Beamwidth ..... –3dB
  Azimuth: ..... 90°
  Elevation: ..... 8°
  X-Pol. Rejection: 25dB
F/B Ratio ..... >20 dB
VSWR: ..... 1.5:1 Max
(R.L.:) ..... (14.0 dB)

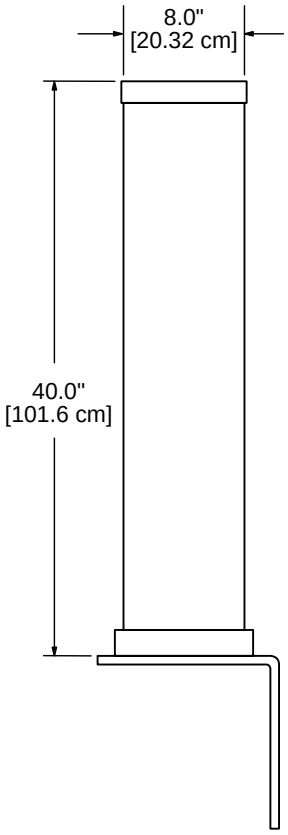
MECHANICAL

Dimensions: ..... 44" Height
7" Diameter

INTERFACE CONNECTION

RF Interface: ..... "N"(F)

Van Mounted Quad Sector TX



Quad Sector TX Antenna Dimensions

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