

Dinesh Micro Waves & Electronics

BASE STATION ANTENNA SYSTEM

Dinesh micro waves and electronics manufacturers of base station antennas covers frequencies that ranges from 50MHZ to 3800MHZ. this includes both narrow band, broad band and multi band models and we designed to meet toughest requirements in terms of application antennas are manufactured with prmium quality materials for extensive maintenance free operations.

Due attention is paid to aesthetics and flexibility during the development of any new products, ensuring customer satisfaction with regards to price, performance and quality.

Our facilities employ the latest software and calculations. Extensive environmental testing, including vibration, shock and wind tunnel measurements, is conducted in accordance with widely recognized international standards.

The wireless cellular mobile industry relies on the RFS base station antenna product line for GSM, SMR, Cellular, PCS, TDMA/CDMA and other leading standards. CELite ® antennas are unique monolithic design, high reliability and broadband capabilities. Our butterfly dipoles reduce our antenna dimensions, enabling the construction of highly compact tower sites with low visual impact. Continuing the road of innovations systems with dual and triple band antennas for both fixed and continuously adjustable electrical down tilt.

Dinesh Micro Waves & Electronics

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DUAL BAND GSM ANTENNA

GSM DUAL BAND Antenna GSM 900/DCS 1800 and Cellular 800/PCS 1900 and GSM900/DCS1800 UMTS variable tilt antennas are cross polarized with a 65° horizontal beam width for use in the following systems.

LOW BAND

Cellular 800 (834-849, 869-894MHz)
GSM900 (872-915, 917-960MHz)

HIGH BAND

DCS 1800 (1710-1785, 1805-1880MHz)
PCS(1850-1910, 1930-1990MHz)
UMTS (1920-1980, 2110-2170MHz)

These antennas have enhanced performance with excellent tilt range, gain, sidelobe suppression, VSWR and front to back ratio and it provides an easy upgrade path for the addition of 3G/UMTS as high band and low band can be optimized separately. Antennas are available in two gain options 14/17 and 16/18 dBi. The product is covered by fiberglass radome and fracture independent continuously adjustable electrical downtilt for each band. Four 7-16 connectors are mounted at the bottom (two 7-16 connectors are duplexed models).

Environmental issues pose a dilemma to cellular network planners in many parts of the world. While more prominent antenna site locations often offer the best performance, they can also attract higher levels of opposition.

Dinesh Microwaves and Electronics has developed a range of environmentally friendly antenna systems to reduce the impact of cellular rollouts. The product range of cluster systems provides the industries most innovative tower top antenna mounting arrangements. This unique cluster mount fits all RFS high band FET & VET antennas. Available with a 65° degree horizontal beamwidth for use in the following systems:

- DCS1800 (1710-1785, 1805-1880MHz)
- PCS (1850-1910, 1930-1990MHz)
- UMTS (1920-1980, 2110-2170MHz)



These high performance antennas have excellent upper sidelobe suppression, VSWR and front to back ratio. The antennas are available in a variety of gain options varying from 14.7 to 19.2dBi covered by a UV resistant fiberglass radome. The clusters can be supplied either with fixed tilt antennas or adjustable tilt models as required. The variable tilt model has continuously adjustable electrical downtilt over the range of 0° to 10°. As with all our variable tilt antenna range they can be upgraded using our OPTIMIZER RT system for remote tilt control.

FEATURES AND BENEFITS

1. Side by side construction allows independent adjustable tilt control of each antenna array.
2. High gain on both bands
3. High suppression of all upper sidelobes
4. 30db isolation between polarizations and bands
5. Stable horizontal and vertical beamwidths
6. Broadband design for high band
7. Low wind load
8. Optional remote Tilt kit

Mounting Hardware & Accessories

Dinesh Microwaves and Electronics has many mounting hardware solutions available for base station antennas and we recently introduced a new universal mount applicable to most panel antennas and available in multiple upgradable configurations:

1. fixed or wall mount,
2. fixed or wall mount with azimuth adjustment,
3. mechanical downtilt mount,
4. mechanical downtilt mount with azimuth adjustment,
5. mechanical downtilt mount with scissor kit,
6. mechanical downtilt mount with scissor kit and azimuth adjustment.

A standard cluster mount is also available and allows three panel antennas to fix around a pole.

Electrical specifications	870-960 MHz	1710 - 2170 MHz
Polarizations	± 45° Slant	± 45° Slant
Θ-3dB Horizontal Plane	65°	66°
Θ-3dB Vertical Plane	6.9°	6.0°
Upper Sidelobe Level (0° to +30°)	< -18 dB	< -18 dB
Cross Polarization Level (0°± 30°)	> 15 dB	> 15 dB
Isolation	> 30 dB	> 30 dB
V.S.W.R. (50Ω)	< 1.5	< 1.5
Intermodulation (2 x 20 W carriers)	< -150 dBc (Im3)	< -150 dBc (Im3) < -160 dBc (IM7)
Variable Tilt	2° - 10°	2° - 10°
Maximum CW Input Power	500 W	500 W

Mechanical Specifications

Dimensions (L/W/D)	2650 x 276 x 143 mm
Connectors	2 x 7/16 DIN
Weight	29 Kg
Mounting Pole Diameter	50 to 115 mm

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