

VEGA Dual Polarisation Antenna



The VEGA Very High Gain Antenna is the most flexible & cost effective solution to some of the more pressing coverage problems in Cellular Networks.

The VEGA antenna's unique $\pm 45^\circ$ Dual Polarization design combines high gain with polarization diversity making it an ideal solution for long corridor coverage such as highways, railways and deep valleys. Remote rural communities can be provided with good service without the need for a separate BTS.

The VEGA Dual-Pol antenna can be used to illuminate "difficult to penetrate" office, commercial & residential buildings in place of expensive and difficult to set up In-Door coverage networks.

The VEGA Parabolic Dish Antenna is robustly constructed of semi-transparent steel mesh for low wind and ice loading and low environmental impact.

Key Features

- Covers All Cellular Bands (805-960MHz)
- Higher Gain for Distance Coverage
- Pencil Beam for Minimum Interference
- Designed for Cellular Applications
- Dual Polarization for Diversity Gain
- Extremely Rugged all Steel Structure
- Very low Wind Load
- 15° Down Tilt Mechanism
- Easy Field Installation
- Compatible with all Cellular Standards
- Small Transportation Packaging
- Low Weight Welded Galvanized Structure
- Transparent Dish for Low Zoning Impact

VEGA Dual Polarisation Antenna (cont.)

Applications

- Less Base Stations Necessary
- Long Highway & Railway Coverage
- Remote Illumination of Distant Targets
- Corridor Coverage Enhancement
- Building Penetration
- Narrow Beam for Repeater Donor Antenna
- Cascaded RF Repeater Antenna
- Spatial Interference Elimination
- Up & Down Link Budget Improvements
- BTS Narrow Sectorization
- Range Enhancing with out Tower-Top LNA
- EIRP Boosting for Hot-Spot Coverage
- Overcoming Multiple Reflection Problems
- Allows More Frequency Reuse



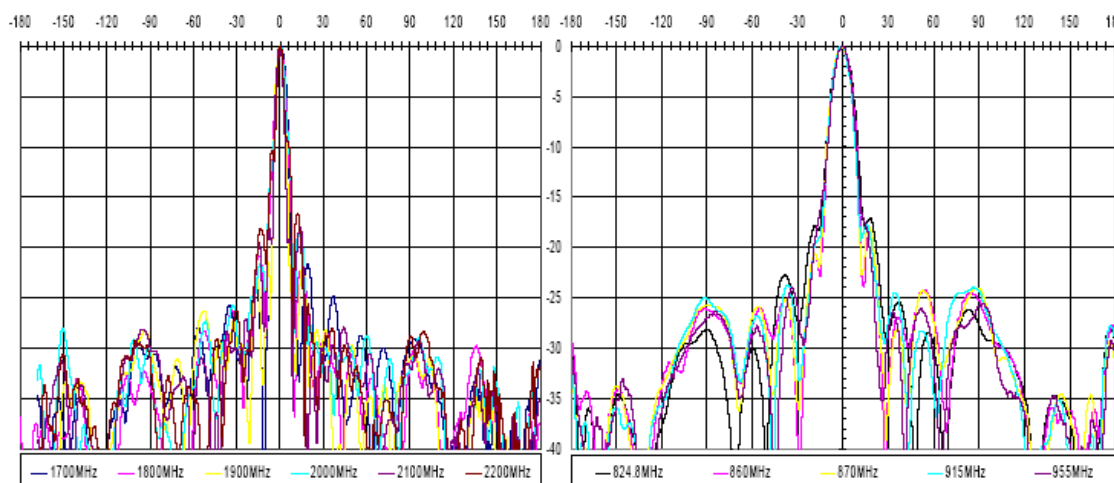
Electrical Specifications

Part Number	Model CC12 iDEN - CDMA - GSM	Model CP12 DCS - PCS - UMTS
Frequency Band	805-960 MHz	1710-2170 MHz
Antenna Gain	22.5±0.5dBi	26±0.5dBi
3 dB Beam Width	11.5°±0.5°	5.5°±0.5°
Cross Polarization (on Axis)	> 26dB	> 26dB
Side Lobes Level @ ±90°	<-25dB	<-30dB typical
Front to Back ratio	>28dB	>35dB
Polarization	Dual (±45°)	Dual (±45°)
VSWR	Low:1.5:1 Med: 1.2:1 High: 1.3:1	1.5:1 typical
RF Power	50W max.	50W max.

VEGA Dual Polarisation Antenna (cont.)

Mechanical Specifications

Reflector Aperture Diameter	2.0 meters (6.66 feet)
Reflector and Back Mount Material	Galvanized Steel
Mounting Pipe Diameter	76mm-115mm (3"-4.5") O.D
Antenna Weight (including Mounting)	44 Kg (97 lb)
Wind Load (axial; side) @200km/h 125mph)	2885N;1140N (647 lb;255 lb)
Down Tilt Continuous Range	0-15°
Connectors	7/16 DIN, Female or N-Type, Female



Typical VEGA Radiation Patterns

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All information contained in the present data sheet is subject to confirmation at time of ordering.

Antennas