

Triple BEAM & DUAL POLARIZATION DISH ANTENNA

VEGA (Patented)

VERY HIGH GAIN, Triple BEAM, Dual Pol ANTENNA

1710-2690MHz Model CP32WB



VEGA-Highest Gain for Targeted Coverage with Lowest Capex

Triple BEAM
6X6 MIMO
Antenna

The VEGA (Very High Gain Antenna) solution is the most flexible & cost-effective means to meet some of the more pressing coverage challenges in Radio Access Networks.

VEGA's Triple beam, $\pm 45^\circ$ Dual Slant Polarization design combines very high gain with polarization diversity enabling 6x6MIMO in dense urban environment.

The triple beam antenna enables higher order sectorization for higher capacity & Range

The CP32WB with three true narrow beams is an ideal solution for long corridor coverage such as highways, railways and deep valleys.

Efficient and cost saving remote rural communities coverage with less towers.

The VEGA Parabolic Dish is robustly constructed of Galvanized steel sheet and mesh for low wind and ice loading and low environmental impact.



Features

Extremely Cost Effective Coverage Enhancement Solution

- ◆ Covers all bands within 1710-2690 MHz
- ◆ Highest Gain for Distant Coverage
- ◆ Three Pencil Beams minimize Interference
- ◆ Lower Coverage Overlap between beams
- ◆ All three Beams total width coverage of 22°
- ◆ Triple Beam Each with Dual Polarization
- ◆ Enables 6x6 MIMO in dense urban area
- ◆ $\pm 15^\circ$ Tilt and Azimuth Mechanism
- ◆ Easy Field Installation
- ◆ Compatible with 3G, 4G, 5G Standards
- ◆ Small Transportation Packaging
- ◆ Low Weight Welded Galvanized Structure



Applications

VEGA applications Save BTS installations

- ◆ Enables 6x6 MIMO in dense urban area
- ◆ Long Highway & Railway Coverage
- ◆ Remote Illumination of Distant Targets
- ◆ Increased Capacity and Coverage
- ◆ Indoor Penetration
- ◆ Improved QOS-higher Signal/Interference
- ◆ Spatial Interference Elimination
- ◆ Up & Down Link Budget Improvements
- ◆ BTS Narrow Beam Sectorization
- ◆ Up to 6 Separate Carriers Feed
- ◆ Capacity Boosting for HotSpot Coverage
- ◆ Less towers required along highways & rails

The VEGA is a COMARCOM product



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Specification subjected to change without notice

Triple BEAM 6X6 MIMO Dish Antenna

Electrical Specifications

Parameter	Model CP32WB				
Frequency Band 1710-2690 MHz	1750MHz	1950MHz	2150 MHz	2450MHz	2650 MHz
Gain [dBi] ± 0.5 dB	27.5 dBi	28.0 dBi	28.5 dBi	28.8dBi	29.0 dBi
3 dB Beam Width (Az & El)	5.2°±0.5°	5°±0.5°	5°±0.5°	4.5°±0.5°	4.5°±0.5°
Beam Centers from boresight (Az)	±7.5°	±7.5°	±7.0°	±7.0°	±7.0°
Azimuth Beams Crossover	-6 dB	-7 dB	-8dB	-9dB	-10dB
Cross Polarization (on Axis)	> 24dB	>27dB	>23dB	>20dB	> 19dB
Interbeam Co-Pol Isolation	>20dB	>20dB	>20dB	>20dB	>20dB
Intrabeam Port to Port Isolation	>25dB	>30dB	>25dB	>23dB	>25dB
1 st Elevation Side Lobes Level	<-13dB	<-13dB	<-13dB	<-11dB	<-11dB
Front to Back ratio	>30dB	>34dB	>38dB	>35dB	>38dB
Polarization	All Three Beams are Dual Slant ($\pm 45^\circ$)				
VSWR	Typ<1.4		Max<1.6		
RF Power per port (max)	200W				
PIM @2x+43dBm input	< -153 dBc				
Lightning Protection	DC Grounded				



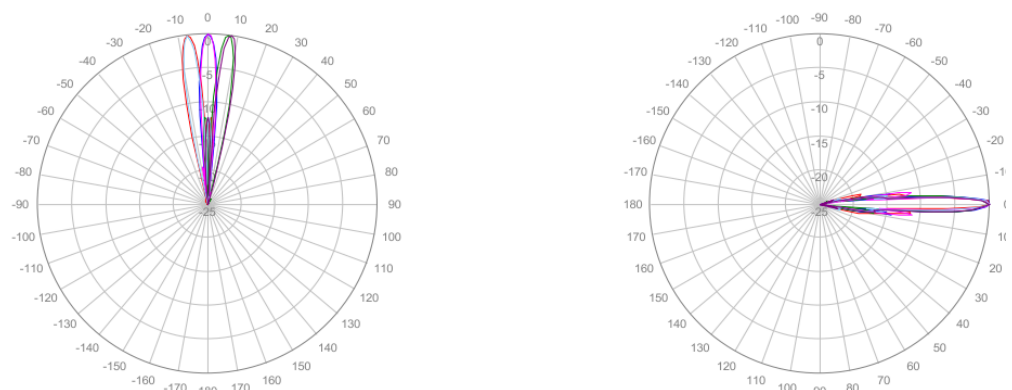
Mechanical & Environmental

Parameter	Specification
Reflector Aperture Diameter	2.0 meters (6.6 feet)
Reflector / Back Mount Material	Galvanized Steel
Mounting Pipe Diameter *	76mm-115mm (3"-4.5") O.D
Antenna Weight (including Mounting Structure)	43 Kg (94 lb)
Wind Load (axial; side) @150km/h (94mph)	2556N;935N (574 lb;210 lb)
Survival Wind Speed	200km/h (125mph)
Operating Temperature Range [°C]	+60 to -60
Down Tilt Adjustment Continuous Range	+5 to -15°
Azimuth Adjustment Continuous Range	+15° / -15°
Connectors	4.3/10 DIN, Female



*Antenna mount & hoisting sling always included

Typical VEGA model CP32WB Radiation Patterns



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COMARCOM
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