EUROPEAN ANTENNAS

Vector Antennas for WiMAX

Sector Base Stations
Omni-Directional
Flat Panel
Broadband

European Antennas Ltd is a member of the WiMAX Forum

COBHAM Antennas

The VECTOR range of antennas meets demanding RF and environmental specifications required for the WiMAX, WLAN and WiFi markets, offering flexible antenna solutions across a range of frequency bands.

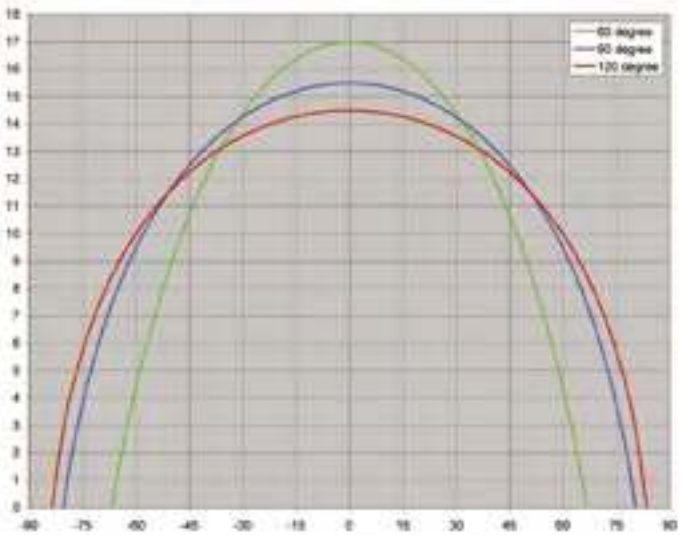
The European Antennas engineering team, who are responsible for the design of rugged specification military antennas, unique RFID antennas, covert and high performance security antennas and ground based satellite antennas, has used their skills to develop this range of good value commercial antennas without compromising build or performance standards.

Today's VECTOR range includes sector antennas (60°, 90°, 120° and 180° azimuth coverage), high gain directional flat panel antennas and a range of omni antennas with up to 11dBi gain.

All antennas are available with vertical polarisation, however base station sector antennas can also be supplied with horizontal, dual polar or dual slant ±45° polarisation. In addition to this growing range of standard products, VECTOR antennas may also be developed for integrated customer solutions.

Each antenna is rigorously measured during the design process to ensure that international standards for antenna radiation patterns are met. They are 100% tested during manufacture to ensure that they match quoted specification and customers' requirements.

Comparison of azimuth patterns for 3.5GHz sector antennas



VECTOR Antenna CATALOGUE

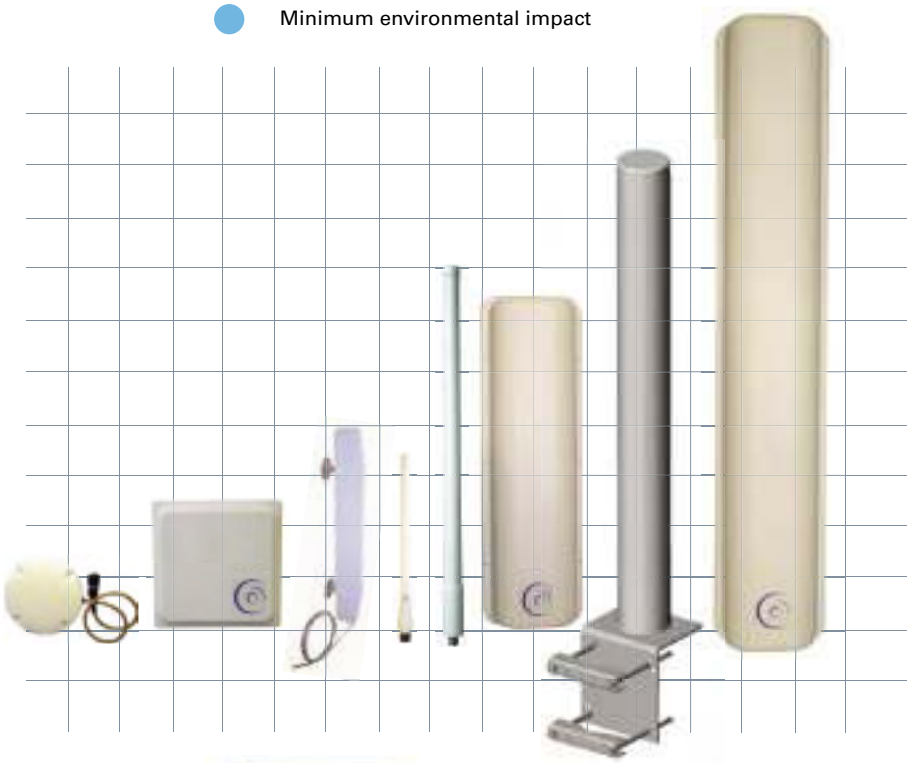
Antenna	Reference	Frequency GHz	Gain dBi	Beamwidth az°	Beamwidth el°	Polarisation	Dimensions mm
VECTOR antenna, 2GHz range							
Flat Panel	Vector FPA9-2.4V/9210	2.30 - 2.50	8.8	67	60	Vertical	22x132 Ø
Base Station 60° Sector	Vector SA17-60-2.5V/9213	2.30 - 2.70	17	60	8	Vertical	1100x200x100
Base Station 90° Sector	Vector SA15-90-2.5V/9214	2.30 - 2.70	15.5	90	8	Vertical	1100x200x100
Base Station 120° Sector	Vector SA14-120-2.5V/9203	2.30 - 2.70	14.5	120	8	Vertical	1100x200x100
Omni	Vector OA4-2.5V/9205	2.40 - 2.70	5.9	360	42	Vertical	290x36 Ø
Omni	Vector OA7-2.5V/9206	2.40 - 2.70	7.4	360	21	Vertical	504x30 Ø
Base Station 60° Sector	Vector SA16-60-2.5V/9201	2.40 - 2.70	16	60	10	Vertical	725x103x10
Base Station 90° Sector	Vector SA15-90-2.5V/9202	2.40 - 2.70	15	90	10	Vertical	725x103x10
VECTOR antenna, 3GHz range							
Omni, High Performance	Vector OA11-HP-3.5V/9307	3.30 - 3.72	11	360	7	Vertical	907x95 Ø
Omni	Vector OA11-3.5V/9306	3.30 - 3.72	11	360	7	Vertical	907x95 Ø
Base Station 60° Sector	Vector SA17-60-3.5DS/9319	3.30 - 3.72	17.2	65	9	Dual ±45°	650x200x100
Window Sector	Vector SA11wimax/9318	3.30 - 3.80	10	140	12	Vertical	385x54x12
Base Station 60° Sector	Vector SA17-60-3.5V/9301	3.30 - 3.80	17.5	60	8	Vertical	650x200x100
Base Station 60° Sector	Vector SA19-60-3.5V/9314	3.30 - 3.80	19	60	5.2	Vertical	1100x200x100
Base Station 60° Sector	Vector SA16-60-3.5H/9315	3.30 - 3.80	16.7	60	8	Horizontal	650x200x100
Base Station 90° Sector	Vector SA15-90-3.5V/9312	3.30 - 3.80	15.4	90	8	Vertical	650x200x100
Base Station 120° Sector	Vector SA14-120-3.5V/9313	3.30 - 3.80	14.8	120	8	Vertical	650x200x100
Base Station 120° Sector	Vector SA16-120-3.5V/9304	3.30 - 3.80	16.8	120	5.2	Vertical	1100x200x100
Base Station 180° Sector	Vector SA13-180-3.5V/9305	3.30 - 3.80	13.4	180	8	Vertical	1100x200x100
Omni	Vector OA10-3.5V/9320	3.40 - 3.60	10	360	9	Vertical	750x36 Ø
Base Station 90° Sector	Vector SA17-90-3.5DS/9325	3.40 - 3.72	16	90	9	Dual ±45°	650x200x100
Base Station 120° Sector	Vector SA14-120-3.5H/9317	3.40 - 3.72	13.8	120	8	Horizontal	650x200x100
Base Station 90° Sector	Vector SA15-90-3.5H/9316	3.40 - 3.80	14.7	90	8	Horizontal	650x200x100
VECTOR antenna, 5GHz range							
Omni	Vector OA9-5.1V/9512	4.90 - 5.30	9.5	360	12	Vertical	360x26 Ø
Base Station 60° Sector	Vector SA17-60-5.5V/9501	4.90 - 5.90	17.5	62	6.5	Vertical	650x200x100
Base Station 90° Sector	Vector SA16-90-5.5V/9502	4.90 - 5.90	16.6	90	6.5	Vertical	650x200x100
Base Station 120° Sector	Vector SA15-120-5.5V/9503	4.90 - 5.90	15	120	6.5	Vertical	650x200x100
Flat Panel	Vector FPA18-5.5V/9506	5.15 - 5.85	18.5	22	22	Vertical	240x240x28
Omni	Vector OA4-5.5V/9515	5.15 - 5.85	5	360	38	Vertical	136x14 Ø
Omni	Vector OA8-5.6V/9505	5.40 - 5.825	8.9	360	11	Vertical	332x26 Ø

VECTOR Antenna Series - QUALITY AND VALUE

- WiMAX interoperability - deployment of broadband wireless networks based on IEEE 802.16 standards, helping to ensure compatibility and interoperability of broadband wireless access equipment
- High specification meets quoted pattern data
- Easy 'out of box' implementation and configuration
- Minimum environmental impact

VECTOR Antenna Series - ALL ARE:

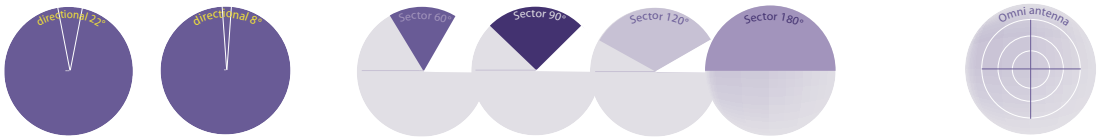
- Robust, discreet in appearance and of light weight construction with UV stable radome providing the benefit of a reliable, high specification antenna
- Available with an optional extra an adjustable steel mounting kit that ensures the antenna is mounted correctly and permanently
- Supplied with a 2-year product warranty, demonstrating our confidence in our product



VECTOR Antenna Series - SPECIFICATION

Flat Panel	Base Station Sector	Omni-directional
2.4 to 2.7GHz	2.4 to 2.7GHz	3.3 to 3.8GHz
4.9 to 5.9GHz	3.3 to 3.8GHz	4.9 to 5.9GHz
	4.9 to 5.9GHz	
GAIN up to 23dBi	GAIN up to 19dBi	GAIN up to 11dBi
POLARISATION	POLARISATION	POLARISATION
Vertical or Horizontal	±45° Dual Slant, Vertical or Horizontal	Vertical

22° 8° 60° 90° 120° 180° 360°



For more information and a quotation, please advise the following information.

Name*

Company*

Email*

Telephone*

Country of origin*

Date*

Project *

Market* (please circle) Civil Security Military Satellite

Quantity*

Time scale*

Antenna type* (eg sector, direction, omni)

Frequency range* (GHz)

Gain* (dBi/dBiC)

Polarisation*

(*Essential data)

Azimuth HPBW (°)

Elevation HPBW (°)

VSWR (maximum)

Mounting requirements

Cross Polar/Axial Ratio (dB)

Electrical tilt (°)

Radiation pattern envelope (Regulatory Compliance)

Front to back ratio (dB)

Interport isolation (dB)

Connector type/location

Antenna environment

Constraints Dimensions (mm) Power rating (W) including cyclic loading Mass (Kg)

Additional notes

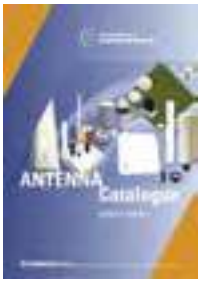
New Product Design

We are able to offer a full antenna design service.

The European Antennas engineering team uses modeling software such as CST and Concerto to assist their knowledge and experience in the development of new antennas. This allows us to predict the performance at an early stage of development and predict how its mounting location can be effected by the surrounding environment.

Our engineering team will work directly with customers' technical teams to develop an antenna solution, and manufacture a prototype that can be tested in our near field anechoic test chamber.

Other brochures and catalogues available



European Antennas Vectors

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