

Cobham Antenna Systems

Microwave Antennas

Specialist Antenna Design and Manufacture

Commercial Antennas for WiMAX, LTE, WLAN & WiFi

The most important thing we build is trust

COBHAM



Robust base stations for all weathers



Sector or omni coverage



Base stations
2.3 to 2.7 GHz
3.3 to 3.8 GHz
4.9 to 5.9 GHz



WiMAX
LTE



VECTOR Antennas

2GHz, 3GHz and 5GHz



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

The Cobham Antenna Systems engineering team, which is responsible for the design of

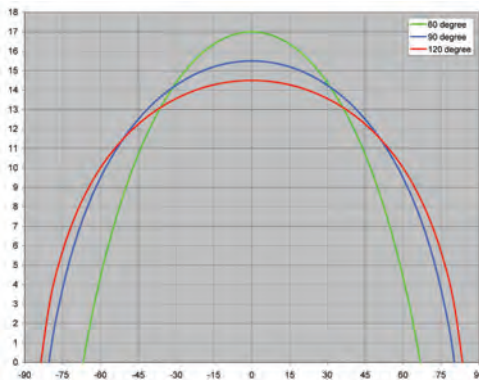
rugged specification military antennas, has used their skills to develop and extend this range of good value commercial antennas without compromising build or performance standards.

The VECTOR range consists of sector antennas (60°, 90° and 120° azimuth coverage), high gain directional flat panel antennas and omni antennas (2 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 $\pm 45^\circ$ 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 sector antennas

Quality and Value

- Dual slant options for more reliable coverage in metropolitan areas.
- LTE compatible, future proofing communication systems
- Null fill options available to provide better close-in coverage, essential in busy metropolitan area.
- Robust, light weight, discreet appearance
- High specification meets quoted pattern data
- Easy 'out of box' implementation
- Minimum environmental impact
- Available with optional adjustable steel mounting kit that ensures the antenna is mounted correctly and permanently

SA17-60-3.5DS/9319



SA15-120-3.5V/9304



VECTOR Antenna Series - Specification

Flat Panel	Omni-directional	Base Station Sector
2.3 to 2.7GHz	2.3 to 2.7GHz	2.3 to 2.7GHz
4.9 to 5.9GHz	3.3 to 3.8GHz	3.3 to 3.8GHz
Gain: up to 23dBi	4.9 to 5.9GHz	4.9 to 5.9GHz
Polarisation: Vertical or Horizontal, Dual Polar, Dual Slant	Gain: up to 11dBi	Gain: up to 19dBi
	Polarisation: Vertical	Polarisation: Vertical or Horizontal, Dual Polar, Dual Slant

OA8-5.6V/9505



OA4-5.5V/9515



OA10-3.5V/9320



FPA16-3.5V/9309



SA11wimax/9318



SA17-60-3.5V/9301



Antenna	Reference	Frequency	Gain GHz	Beamwidth dBi az'		Polarisation el'	Dimensions	Connector mm	Photo ▲
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2GHz range

Directional

Flat Panel	Vector FPA9-2.4V/9210	2.30 - 2.50	9	67	60	Vertical	22x132 Ø	SMA(F)	
Flat Panel	Vector FPA19-2.5V/9209	2.40 - 2.70	19	17.5	17.5	Vertical	430x430x29	N(F)	

Sector

60° Sector	Vector SA16-60-2.5V/9201	2.40 - 2.70	16	60	10	Vertical	725x103x101	N(F)	
64° Sector	Vector SA17-60-2.5V/9213	2.30 - 2.70	17	64	8	Vertical	1100x200x101	N(F)	
90° Sector	Vector SA15-90-2.5V/9202	2.40 - 2.70	15	90	10	Vertical	725x103x101	N(F)	
120° Sector	Vector SA15-120-2.5V/9203	2.30 - 2.70	15	120	8	Vertical	1100x200x101	N(F)	

Omni

Omni	Vector OA9-2.5V/9207	2.40 - 2.50	10	360	10	Vertical	905x57 Ø	N(F)	
Omni	Vector OA4-2.5V/9205	2.40 - 2.70	6	360	42	Vertical	290x36 Ø	N(F)	
Omni	Vector OA7-2.5V/9206	2.40 - 2.70	7	360	21	Vertical	504x36 Ø	N(F)	

3GHz range

Directional

Flat Panel	Vector FPA16-3.5V/9309	3.30 - 3.80	17.5	23	23	Vertical	240x240x29	N(F)	▲
Flat Panel	Vector FPA25-3.5V/9339	3.30 - 3.80	24.5	8.2	8.3	Vertical	573x573x18	N(F)	
Flat panel	Vector FPA23-3.5V/9311	3.40 - 3.72	24	8	8	Vertical	650x650	N(F)	

Sector

65° Sector	Vector SA17-60-3.5DS/9319	3.30 - 3.72	17	65	9	Dual ±45	650x200x101	N(F) x2	▲
60° Sector	Vector SA16-60-3.5H/9315	3.30 - 3.80	16.7	60	8	Horizontal	650x200x100	N(F)	
60° Sector	Vector SA17-60-3.5V/9301	3.30 - 3.80	18	60	8	Vertical	650x200x100	N(F)	▲
60° Sector	Vector SA19-60-3.5V/9314	3.30 - 3.80	19	60	5	Vertical	1100x200x101	N(F)	
120° Sector window	Vector SA11wimax/9318	3.30 - 3.80	11	120	12	Vertical	385x54x12	MCX 90° 1.5m cable	▲
180° Sector	Vector SA12-180-3.5V/9305	3.30 - 3.80	12	180	8	Vertical	1650x200x100	N(F)	
120° Sector	Vector SA14-120-3.5V/9313	3.30 - 3.80	14.8	120	8	Vertical	650x200x100	N(F)	
90° Sector	Vector SA15-90-3.5V/9312	3.30 - 3.80	15	90	8	Vertical	650x200x100	N(F)	
120° Sector	Vector SA15-120-3.5V/9304	3.30 - 3.80	16.8	120	5.5	Vertical	1100x200x100	N(F)	▲
90° Sector	Vector SA17-90-3.5V/9303	3.30 - 3.80	17	90	5.5	Vertical	1100x200x101	N(F)	
90° Sector	Vector SA17-90-3.5DS/9325	3.40 - 3.60	15	90	9	Dual ±45°	650x200x101	N(F) x2	
120° Sector	Vector SA14-120-3.5H/9317	3.40 - 3.72	13.8	120	8	Horizontal	650x200x100	N(F)	
60° Sector	Vector SA16HP-60-3.5V/9302	3.40 - 3.72	17	60	10	Vertical	590x265x50	N(F)	
90° Sector	Vector SA15-90-3.5H/9316	3.40 - 3.80	14.7	90	8	Horizontal	650x200x100	N(F)	
115° Sector	Vector SA14-120-3.7V/9335	3.60 - 3.80	14.9	115	8	Vertical	650x200x101	N(F)	
95° Sector	Vector SA15-90-3.7V/9334	3.60 - 3.80	15.4	95	8	Vertical	650x200x101	N(F)	
62° Sector	Vector SA17-60/3.7V/9333	3.60 - 3.80	17.2	62.5	7.5	Vertical	650x200x101	N(F)	

Omni

Omni	Vector OA10-3.4V/9323	3.30 - 3.50	10	360	9	Vertical	785x36 Ø	N(F)	
Omni	Vector OA11HP-3.5V/9306	3.30 - 3.72	11	360	7	Vertical	907x95 Ø	N(F)	
Omni	Vector OA11-HP-3.5V/9307	3.30 - 3.72	11	360	7	Vertical	907x95 Ø	N(F)	
Omni	Vector OA7-3.5V/9321	3.30 - 3.80	7	360	20	Vertical	405x36 Ø	N(F)	
Omni	Vector OA10-3.5V/9320	3.40 - 3.60	10	360	9	Vertical	765x36 Ø	N(F)	▲
Omni	Vector OA10-3.7V/9324	3.60 - 3.80	10	360	9	Vertical	730x36 Ø	N(F)	

5GHz range

Directional

Flat Panel	Vector FPA19-5.5V/9506	5.15 - 5.85	19	17.5	15.5	Vertical	240x240x29	N(F)	
Flat Panel	Vector FPA18-5.8V/9510	5.72 - 5.87	18	20	20	Vertical	240x240x29	N(F)	

Sector

60° Sector	Vector SA17-60-5.5V/9501	4.90 - 5.90	17	60	6.5	Vertical	650x200x100	N(F)	
90° Sector	Vector SA16-90-5.5V/9502	4.90 - 5.90	16	90	6.5	Vertical	650x200x101	N(F)	
120° Sector	Vector SA15-120-5.5V/9503	4.90 - 5.90	15	120	6.5	Vertical	650x200x101	N(F)	

Omni

Omni	Vector OA9-5.1V/9512	4.90 - 5.30	9	360	12	Vertical	360x26 Ø	N(F)	
Omni	Vector OA4-5.5V/9515	5.15 - 5.85	5	360	38	Vertical	136x14 Ø	N(F)	▲
Omni	Vector OA8-5.6V/9505	5.40 - 5.85	9	360	11	Vertical	332x26 Ø	N(F)	▲



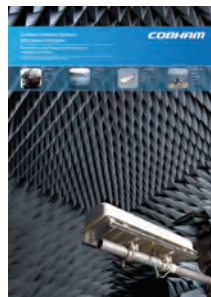
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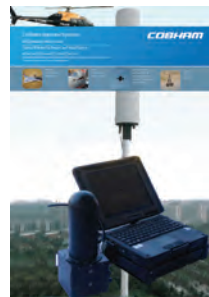
2012 Catalogue



Total Capability



Antenna Testing



Ground Control



Electronic Warfare



Body Worn



Link16



IED Countermeasures



WiMAX and LTE



Unmanned Systems



C-Band



Radar Systems

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