

Cobham Antenna Systems

Microwave Antennas

Body Worn Antennas

COBHAM

The most important thing we build is trust



Body Worn
Antennas



Antennas
for Light
Vehicles



Antennas
for
Armoured
Vehicles



Antennas
for Patrol
Tactical
Comms



Body Worn Antennas

Localised Tactical Communications for Security and Military

Body worn and wearable antennas for foot patrol



Tactical Communications

Communication between personnel on the ground and the control centre is vital in today's military and security world.

Constant voice, data and video exchange allows tactical decisions to be made in the control centre and passed to those in the field.

TETRA (Terrestrial Trunked Radio) is an interoperability standard that allows equipment from multiple vendors to operate with each other. It comprises a suite of open digital trunked radio standards used by Private Mobile Radio (PMR) operators for public safety, military and Police. Applications include transportation, utilities, government, commercial, industrial, oil and gas industries.



Front Line, Live Video Surveillance

A light weight, directional antenna (model DHDA-2.4V/1448) was designed for integration within the Body Worn Video Wireless Solution, developed by Reveal Media and Cobham Surveillance/Domo, providing four live video feeds and GPS data. This system was used at Glastonbury Rock Festival by Avon & Somerset Police foot patrol and mounted officers.



The Body Worn Wireless Video system with helmet-mounted antenna was used in a full scale public order training exercise by Kent Police. The system provided the Police with a real-time situation overview, plus front line and close-up images that may be recorded as part of an evidence gathering system.



Battlefield Communications

Reliable radio communications in theatre are crucial, needing good 360° coverage usually requiring above head-height omni-directional antennas. The alternative to the standard whip antenna are slim, light weight, body-worn antennas which are designed to provide an improved signal pattern for a greater all round coverage.

A further benefit is provided by circular polarisation that reduces the problem of polarisation mismatch when soldiers are in different orientations with respect to each other. These antennas have the added advantage of being less intrusive and more comfortable for the wearer with lower RF energy penetrating the wearer's body.

Body Worn Sector Antennas

These antennas are wide band, with wide-angle sectoral coverage. They have high gain and can be configured in single, double or quad format depending on the radio. They are robust and field proven.

HDA-1.3V/1488
Single Antenna



HDA-2.4V/1423
Single Antenna



DHDA-2.4V/1448
Dual Antenna



DHDA-5.7V/1584
Dual Antenna



Model	Frequency GHz	Gain dBi	Beamwidth az° el°	Polarisation	Dimensions mm	Connector	Photo
HDA-1.2V/1545	1.15 - 1.26	1	120 100	Vertical	82x37x46	SMA(M)	▲
HDA-1.3V/1488	1.26 - 1.40	5	120 70	Vertical	82x37x46	SMA(M)	▲
DHDA-1.4V/1680	1.35 - 1.45	1	160 80	Vertical	82x37x46	SMA(M)	
HDA-1.7V/1682	1.55 - 1.70	3.5	123 70	Vertical	82x37x46	SMA(M)	▲
DHDA-2.4V/1448	2.28 - 2.55	1	160 78.5	Vertical	82x37x46	SMA(M)	▲
HDA-2.4V/1423	2.28 - 2.55	4	160 78.5	Vertical	82x37x46	SMA(M)	▲
HDA-3.3V/1543	3.10 - 3.40	5	160 75	Vertical	82x37x46	SMA(M) 250mm cable	
DHDA-5.7V/1584	5.00 - 6.30	1	160 90	Vertical	82x37x46	SMA(M) 400mm cable	▲



Narrow band body worn antenna attached to webbing for convenience and reliable coverage for foot patrol



Front line, video surveillance utilising helmet mounted antennas

Narrow Band Patch Antennas

Narrow band directional patch antennas are ideal for covert, security applications. This type of antenna is extremely slim, 2 to 4mm in depth and may be sewn into clothing or webbing.

Model	Frequency GHz	Gain dBi	Beamwidth az° el°	Polarisation	Dimensions mm	Connector	Photo
PA5-2344L/701	0.2344	5	90 90	Left Circular	80x65x2	SMA(F)	▲
PA5-915V/370	0.91 - 0.92	5	76 76	Vertical	180x180x2	SMA(F)	
PA5-1500R/056	1.48 - 1.52	5	100 100	Right Circular	110x92x2	SMA(F)	
PA5-GPS-UE3/277	1.575	5	90 90	Right Circular	2x90 Ø	MCX 90° 232mm cable	
PA5-2340V/461	2.33 - 2.345	5	90 90	Vertical	80x65x2	SMA(F)	
PA5-2350R/168	2.33 - 2.37	5	90 90	Right Circular	80x65x2	SMA(F)	
DPA1-2.3V/1610	2.34 - 2.36	0.5	90 90	Vertical	4x60 Ø	-	▲
PA5-2370L/819	2.35 - 2.39	5	90 90	Left Circular	80x75x3	SMA(F)	
PA5-2370R/623	2.35 - 2.39	5	90 90	Right Circular	80x75x3	SMA(F)	
PA5-2420L/886	2.42 ±20MHz	5	100 100	Left Circular	80x65x2	SMA(F)	
PA5-2420R/264	2.42 - 2.44	5	100 100	Right Circular	80x65x2	SMA(F)	
PA5-2460R/133	2.44 - 2.48	5	100 100	Right Circular	80x65x2	SMA(F)	
DPA1-2467R-Q/910	2.45 - 2.484	2	85 83	Right Circular	7x75 Ø	SMA(M)	

DPA1-2.3V/1610

Narrow Dual Patch Antenna 4mm thick, with splitter



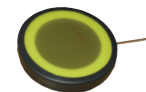
Wide Band Patch Antennas

Wide band patch antennas are ideal for covert, security applications. Slightly deeper in construction than narrow band antennas, these can still be disguised within clothing, webbing and baggage. They are directional in coverage.

Model	Frequency GHz	Gain dBi	Beamwidth az° el°	Polarisation	Dimensions mm	Connector	Photo
DPA3-2100R/1125	2.00 - 2.20	3	65 65	Right Circular	17x77 Ø	SMA(M) 90°	▲
PA6-2.3V/1600	2.25 - 2.35	8	84 66	Vertical	13x80 Ø	SMA(M) 430mm cable	▲
DPA2-2.3V/1611	2.28 - 2.55	5	66 79	Vertical	13x80 Ø	SMA(M)	▲
DPA1-2440R/1135	2.40 - 2.50	2	80 75	Right Circular	6x75 Ø	SMA(M)	
DPA1-47VH/1164	4.40 - 5.00	3	70 51	Dual V&H	9x62 Ø	SMA(M)	
DPA1-47R/1163	4.40 - 5.00	3	62.5 61.5	Right Circular	9x62 Ø	SMA(M)	

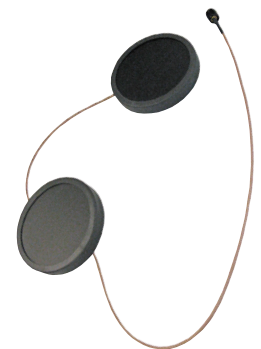
PA6-2.3V/1600

Single Patch Antenna



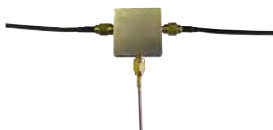
DPA2-2.3V/1611

Dual Patch Antenna



Wire Style Antennas

These antennas are centre-fed wire dipoles which provide omni coverage in open environments. They are suitable for lower frequency covert applications and may be hidden within clothing, where the beamwidth reduces to 180° if used in body-worn applications. They can be used in pairs to provide 360° coverage.



Centre frequency 230MHz



Centre frequency 350MHz



Centre frequency 380MHz



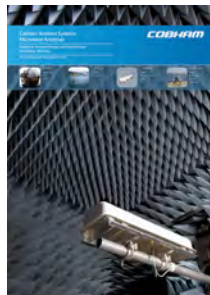
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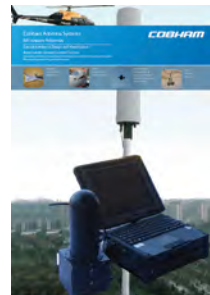
Antenna Catalogue



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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