

Transit Antenna

The most important thing we build is trust

The OA5-0.8-2.7V antenna is designed for rail, light rail and bus applications and other similarly demanding transit or stationary applications.

With a VSWR of less than 2:1 covering 0.8 to 2.7GHz, the antenna operates in all cellular bands, plus the 2.4GHz ISM band. An active GPS antenna is incorporated for asset tracking and AVL applications.

Designed utilising a high impact, UV stabilised low Flame, Smoke and Toxicity (FST) radome, the antenna is IP68 rated to fully protect against the ingress of dust and water.

Designed to meet the following European Traction Industry Standards:

- NF-F-16-101/102 Materials
- EN50155 Vibration
- EN50124-1 Electrical Isolation
- Functions with or without a ground plane, nominated gain achieved using a 1m2 ground plane



**ELECTRICAL**

Model	OA5-0.8-2.7V
Peak Gain dBi/dBd	5(3)@0.824 - 0.96 6(0)@1.71 - 2.17
Frequency GHz	0.80 - 0.96 1.71 - 2.70
Tuned Bandwidth	Full
VSWR (Return Loss)	<2:1
Nominal Impedance Ω	50
Vertical Beamwidth*	38/180
Horizontal Beamwidth	Omni-Directional
Input Power W	50

**MECHANICAL**

Model	OA5-0.8-2.7V
Construction	NF-F-16-102 compliant injection moulded radome/cast aluminium alloy base
Area mm	205 x 100
Height mm	90 inc gasket
Termination	Antenna port: Fixed N(F) GPS port: Fixed TNC(F)
Mounting Area	M6 screws x4 (not included)

**GPS Where fitted**

Model	OA5-0.8-2.7V
Fo	1575.42MHz
Operating Temperature °C	-40 to +85
Storage Temperature °C	-40 to +100
System Gain at Fo dBi	28 inc cable and filter losses
Impedance Ω	50
Polarisation	Right Circular
VSWR at Fo	1.5:1
Noise Figure at Fo dB	<1.8 max
Power Input	+2.5VDC to +12VDC Input, Auto Switching
Power Consumption	11mA to 13mA (max)
Typical Isolation Between Ports dB	>36 for 0.806 - 0.96 >30 for 1.71 - 2.17 >38 for 2.40 - 2.70

European Antennas Limited trading as Cobham Antenna Systems, Microwave Antennas

European Antennas Limited has a policy of continuous development and stress that the information provided is a guide only and does not constitute an offer or contract or part thereof. Whilst every effort is made to ensure the accuracy of the information contained in this brochure, no responsibility can be accepted for any errors or omissions.

The copyright of antenna designs and images is copyright protected and owned by European Antennas Limited.  
©European Antennas Limited

For further information please contact:

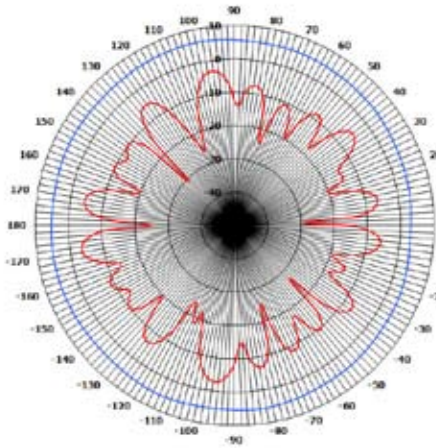
Cobham Antenna Systems, Microwave Antennas  
Lambda House, Cheveley,  
Newmarket, Suffolk CB8 9RG, UK.  
Tel +44 (0)1638 732 177  
Fax +44 (0) 1638 731999  
Email [antennasystems.ma@cobham.com](mailto:antennasystems.ma@cobham.com)

OA0-0.2-1.0V Antenna  
PROVISIONAL SPECIFICATION

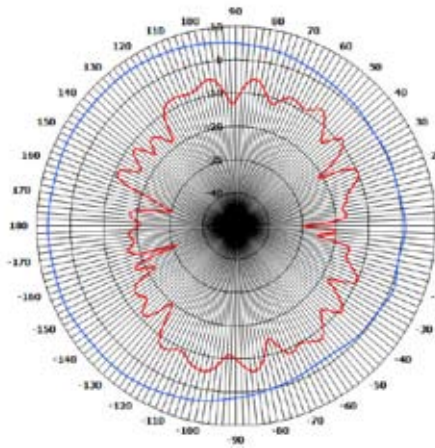
The most important thing we build is trust

Co-Polar  X-Polar 

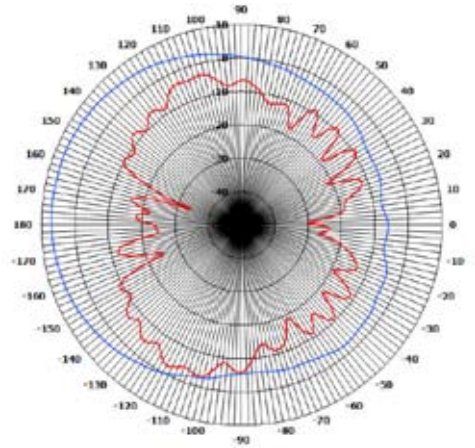
Azimuth polar plot at 0.9GHz



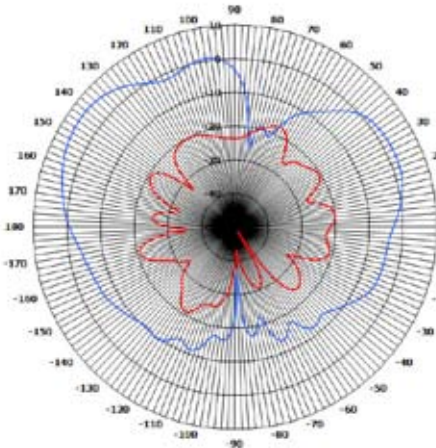
Azimuth polar plot at 1.8GHz



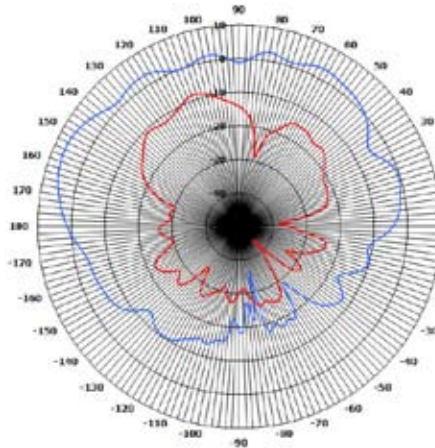
Azimuth polar plot at 2.1GHz



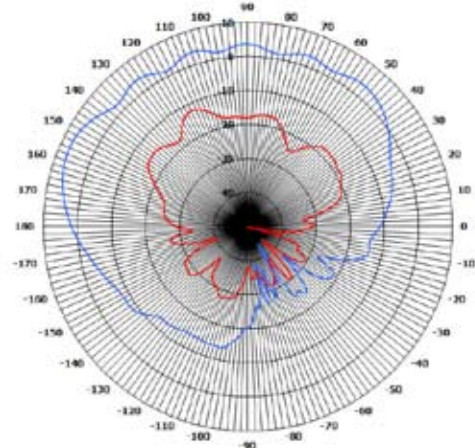
Elevation polar plot at 0.9GHz



Elevation polar plot at 1.8GHz



Elevation polar plot at 2.1GHz



European Antennas Limited trading as Cobham Antenna Systems, Microwave Antennas

European Antennas Limited has a policy of continuous development and stress that the information provided is a guide only and does not constitute an offer or contract or part thereof. Whilst every effort is made to ensure the accuracy of the information contained in this brochure, no responsibility can be accepted for any errors or omissions.

The copyright of antenna designs and images is copyright protected and owned by European Antennas Limited.  
©European Antennas Limited

For further information please contact:

Cobham Antenna Systems, Microwave Antennas  
Lambda House, Cheveley,  
Newmarket, Suffolk CB8 9RG, UK.  
Tel +44 (0)1638 732 177  
Fax +44 (0) 1638 731999  
Email [antennasystems.ma@cobham.com](mailto:antennasystems.ma@cobham.com)