

Cobham Antenna Systems

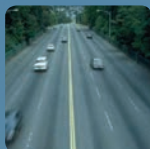
Microwave Antennas

COBHAM

Specialist Antenna Design and Manufacture

RFID Antennas

The most important thing we build is trust



ROAD TOLLING

Automatic road tolling providing accurate vehicle charging, enabled through rugged and efficient RFID antennas



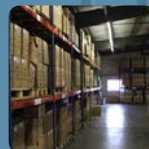
SECURITY

Valuable items can be monitored and secured using RFID antennas reducing risk of theft and potentially insurance costs



HEALTHCARE

Medical equipment and patients can be tracked and monitored reducing patient turnaround times in theatres and wards

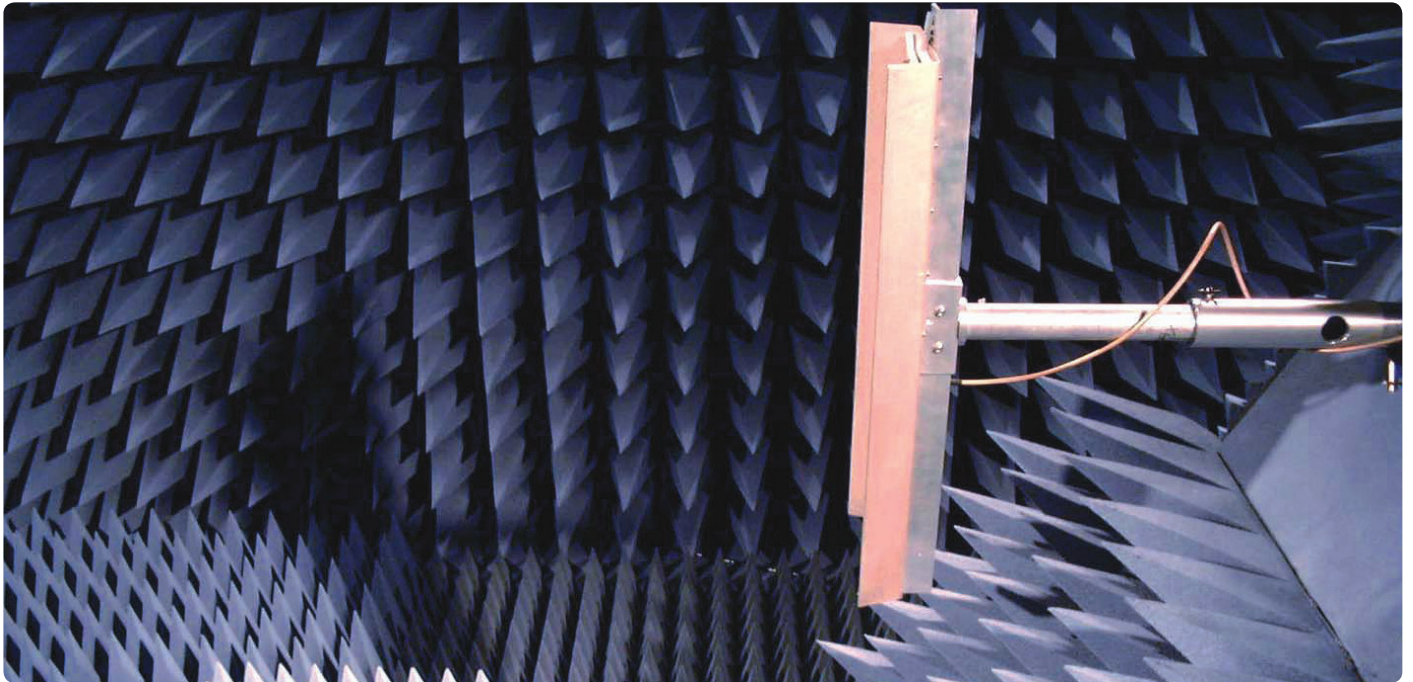


STOCK CONTROL

Stock can be tracked and monitored efficiently reducing handling, turnaround and shipping times



Introduction



RFID and Cobham Antenna Systems

Radio frequency identification (RFID) has evolved into a major technology tool for tracking goods and assets.

Organisations can locate and track expensive equipment more quickly, improving operational efficiency as required in today's world.

Manufacturers and logistics providers are utilising RFID to improve the management of assets by tracking goods from the point of manufacture through to point of sale (POS).

As a result there is a significant uptake of RFID at many stages of the supply chain.

With these developments it is important to ensure that RFID systems are designed and installed to maximise performance.

Tags and readers are a key component, but the overall performance of the system can be improved by selecting the correct antennas during planning and installing them in the right location to operate with the readers.

Cobham Antenna Systems (Microwave Antennas), in conjunction with a number of RFID reader manufacturers and system integrators, has developed antennas to maximise installation performance.

Through a range of antennas that offer controlled and repeatable pattern coverage, accurate efficient RFID systems are being achieved.

The Cobham Antenna Systems' range of RFID antennas cover the 433 and 868MHz bands and the 915MHz band for non-European installations.

Antennas are rigorously measured during the design process to ensure that international standards for radiation patterns are met.

The range includes omni and directional antennas with a variety of gain measurements.

Antennas with sector coverage are used for portal control, providing a reading zone directly below doorways.

RFID antennas supplied by Cobham Antenna Systems are already being used in several locations including:

- Stock monitoring at military depots
- A private hospital operating theatre, ensuring accurate operation times are recorded
- Cargo monitoring system, enabling tags to be read on an approaching container vehicle so that the correct crane and replacement container can be in place on arrival
- Road tolling where each vehicle has to be correctly identified to ensure accurate fees are charged
- Securing valuable artefacts at museums and galleries

Antennas are 100% tested during manufacture to ensure that they match quoted specification and customer requirements.

Product Range

Accurate, focused beam ensures extraneous RF signals, or tags in other areas do not affect the reading of the scanning antenna.

- Custom development projects undertaken
- Antennas can be designed to meet specific zone coverage
- All antennas have a high specification and meet quoted radiation pattern data
- Small, lightweight and discreet in appearance for minimum environmental impact
- Robust construction with mounting kit options
- Optional colour finishes, connectors and cable lengths



433MHz Range

DIRECTIONAL

Part Number	Frequency GHz	Gain dBi	Beamwidth		Polarisation	Size mm	Connector
			Az	El			
FPA0-0.4R/9401	0.433	0	80	80	Right Circular	325x325x41	BNC (M) 1m Cable
FPA4-0.4R/9402	0.433	4	47	48	Right Circular	725x725x3	BNC (M) 1m Cable
FPA0-0.4R/9403	0.433	0	80	80	Right Circular	585x585x3	BNC (M) 1m Cable

SECTOR

Part Number	Frequency GHz	Gain dBi	Beamwidth		Polarisation	Size mm	Connector
			Az	El			
SA4-0.4V/9404	0.40-0.45	5	160	75	Vertical	203x136x2	BNC (M) 1m Cable

868MHz Range

DIRECTIONAL

Part Number	Frequency GHz	Gain dBi	Beamwidth		Polarisation	Size mm	Connector
			Az	El			
FPA2-0.9R/9405	0.868	1.5	85	75	Right Circular	170x170x3	BNC (M) 1m Cable
FPA5-0.9R/9406	0.868	5.2	46	46	Right Circular	390x390x3	BNC (M) 1m Cable

SECTOR

Part Number	Frequency GHz	Gain dBi	Beamwidth		Polarisation	Size mm	Connector
			Az	El			
SA4-0.9V/9407	0.868	4	180	75	Vertical	203x136x2	Options

915MHz Range

DIRECTIONAL

Part Number	Frequency GHz	Gain dBi	Beamwidth		Polarisation	Size mm	Connector
			Az	El			
LPA7-900V-701/363	0.88-0.96	8	70	55	Vertical	301x246x21	N(M) 90° 0.3m cable
FPA15-916H/1159	0.90-0.93	15.4	24	31	Horizontal	762x559x17	N(F)
PA5-915V/370	0.91-0.92	5	76	76	Vertical	180x180x2	SMA(F)



2012 Catalogue



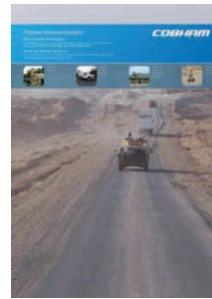
Total Capability



Antenna Testing



Ground Control



Electronic Warfare



Body Worn



Link16



WiMAX and LTE



Unmanned Systems



C-Band



Radar Systems



DAS



Chelton Limited trading as Cobham Antenna Systems

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