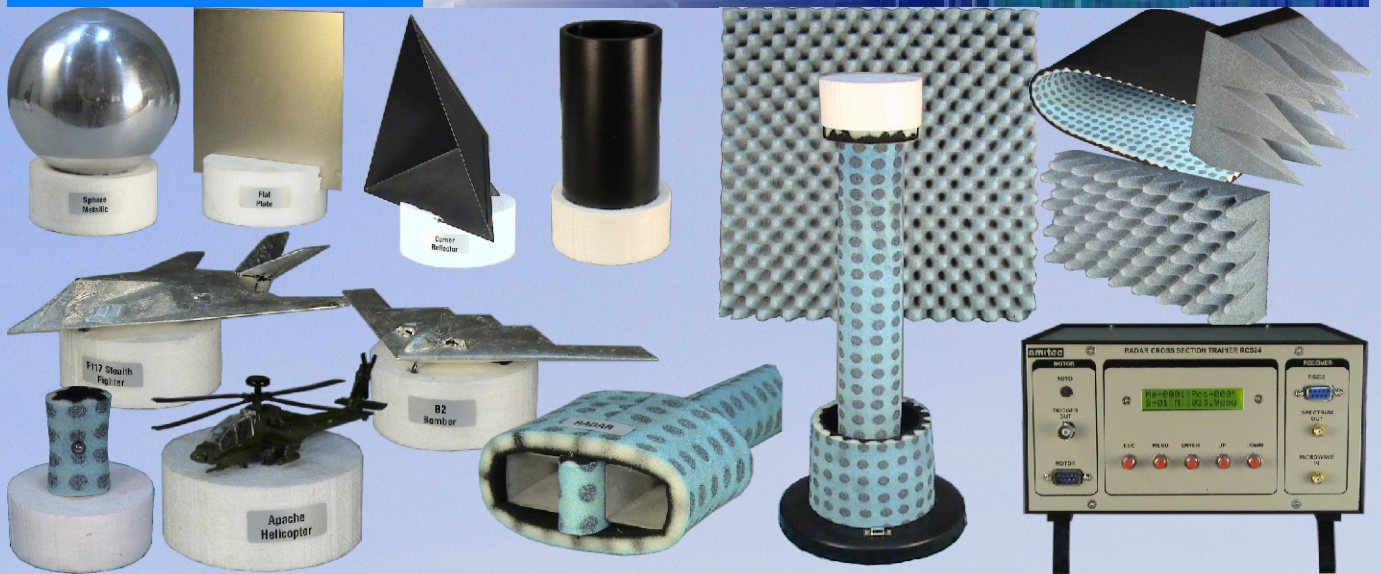


amitec RADAR CROSS SECTION TRAINING LAB RCS24



Amitec Radar Cross Section Training Lab RCS24

Amitec Model RCS24 Radar cross section Training Lab has been designed using the state of the art technology for testing of radar cross section of real life scaled targets.

The system includes a stepper motor controlled very low RCS target support. Microwave absorber panels are provided, which reduce the background clutter and reflection, for detection of targets with very low reflectivity and efficient background subtraction. It obviates the need for anechoic test range and still performs indoor measurements for privacy. Use of K band allows smaller wavelength for measurement, allowing smaller features to be tested. Use of smaller antennas allow compact range with far field <1m. Low radiated power combined with very high sensitivity allows large range of measurements. Direct measurement in dB with 0.1dB resolution with accurate log processing with temperature compensation yields repeatable results. This is a truly unique system that places real-time, safe, and unclassified EW demonstrations into the hands of students.

Amitec RCS24 Features:

- * K Band microwave operation
- * Very high sensitivity with low power
- * Very low reflectivity anechoic absorber panels
- * Self Calibration using accurate reference targets
- * Optimum absorbers for normal/ grazing angles
- * Accurate table top measurement indoors

Amitec RCS24 Technical Specifications

Radar	:	K Band Bistatic CW
Farfield	:	>1m (Indoor operation)
Radiated Power	:	+20 dBm EIRP
Sensitivity	:	-100dBm
Capture threshold	:	-40dBsm
Target threshold	:	<1 lambda sphere
RCS processor	:	10bits
Range	:	>60 dBsm
Measurement	:	dBm, dBuV,
Resolution	:	0.1dBsm
Display	:	16X2 LCD
Demodulation	:	Logarithmic
Bandwidth	:	10 MHz
Anechoic absorbers	:	60cmX60cmX6
Absorber type	:	EM Lossy PU Near Field
Reflectivity	:	-30dB @ K Band
Equivalent RCS	:	-40dBsm @ K Band
Target rotator	:	360 degrees
Controller	:	Stepper motor
Angular resolution	:	1 degree
Loading	:	5Kg
Target Size	:	< 500mm
Rotator RCS	:	<40dBsm
Stealth accessories	:	RAM Cones, Sheets, Paints,
Scale models	:	Helicopter, Airliner, Stealth aircraft, Boat
Reference target	:	Sphere - Metallic
Size	:	>10Lambda
Study targets	:	Corner reflector, Flat plate metal/absorber, Cylinder, Threshold target
Software	:	Windows XP for RCS measurement and polar /cartesian plotting
Power Supply AC	:	220V \pm 10% 50 Hz
Accessories	:	Mains Lead, etc

E-Manual: Installation Video for ease of Learning

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