RSTC - REMC Standard Test Cell



SOLUTION FOR

High performance systems for EMC and RF protection environments

A Rainford Standard Test Cell has been developed for the R&D, production and quality control environments where space is critical. The cube like design has been produced for small sized DUT's (0.5 m x 0.5 m) approximately. The main body of the unit is constructed from 2 mm thick steel tray that can be either bolted with TCS gasket or welded.

Operating Frequency: 10 KHz - 20 GHz

Using the same high end SmartShield technology as incorporated in our larger shielded rooms the RSTC will provide protection and isolation from the surrounding RF environment. With the addition of ferrite and absorber materials low reflections and stable quiet zones are achievable.

Key features

- An ideal environment for testing wireless devices as GSM, UMTS, CDMA, Bluetooth, DECT, W-LAN, Zigbee, RFID, Wimax etc.
- RSTC also meets several ETSI test standards (UKAS accredited)
- Optimised computer modelling to enable partial Hybrid low cost version
- Penetration and filtering can be adapted to the customer's requirements
- Flexible modular design enables easy site changes or upgrading
- Independently certified 100 dB @ 18 GHz shielding performance (ISO17025)

General Description

The Rainford RSTC chamber's overall size results from the use of a unique hybrid absorber design, which require less volumetric space than traditional absorbers.

Using our SmartShield high performance, modular construction shielding system, we can offer a versatile demountable system.

A combined Managerial experience in EMC of over 100 years, to provide complete customer satisfaction.

The Rainford RSTC is just one of a range of predefined designs that includes the Rainford RMCC (Mini Compact Chamber), REMC3, REMC5 & REMC10.

Our vast experience and design tools allow us to adapt our existing designs to suit specific customers requirements.

High quality and long life, are guaranteed with our ISO9001 certified production facility.

With the future in mind, Rainford EMC is certified according to the Environmental standard ISO14001.



GENERAL SPECIFICATION

Dimensions	0.45 m x 0.45 m x 0.45 m Or 0.90 m x 0.90 m x 0.90 m		
Main Body Material	Galvanised spangled stainless steel (2 mm)		
Door	0.3 m x 0.3 m Double knife edge, over sized hinges		
Construction	Bolted with 100 mm centres		
Gasket	Double 'P' type TCS (Tin Copper Silver)		
Attenuvent	150 mm x 150 mm Honeycomb stainless Steel		
Penetrations	Main filter Single Phase 240V 16A 1 x N-type connector 1 x BNC connector 1 x Optical 1A		
Options	 5A DC filter 9-pin D-type interface 25-pin D-type interface USB interface LAN interface 		

Shielding Attenuation Specification

FREQUENCY	FIELD	ATTENUATION	
10 kHz	Н	60 dB	
200 kHz	Н	100 dB	
1 MHz	E	100 dB	
100 MHz	E	100 dB	
500 MHz	Е	100 dB	
1 GHz	Р	100 dB	
10 GHz	μ	100 dB	
18 GHz	μ	100 dB	

Please note that whilst only two model sizes haven been mentioned (0.9 m x 0.9 m x 0.9 m and 0.45 m x 0.45 m x 0.45 m), we can adapt our designs to suit your requirements. If you feel that these sizes/ configurations do not ideally match your needs please contact us to discuss your requirements further.









