

RF/EMI Shielding: Reverberation Chamber

Select Fabricators Reverberation Chambers utilize innovative motor induced vibrations of tent walls to achieve an electromagnetic environment suitable for testing immunity, emissions, and shielding effectiveness. This method allows for smaller enclosure sizes, reduced cost, and higher field-to-input power ratios.

Our reverberation chambers operate have a reflective conductive fabric which contain and reflect radiated RF energy. In combination with a fabric rotating paddle stirrer, these enclosures create statistical isotropy and homogeneity across a substantial working volume.

Reverberation chambers stand out for their ability to generate robust field strengths with lower power consumption compared to alternative testing environments. This allows for maximized performance while reducing the need for expensive amplifiers.

Construction

Made in the USA with Nova Select[™] fabric. Nova Select[™] is a silver/copper/nickel conductive fabric with an average shielding effectiveness of over -95 dB in the range of 20 MHz to 40 GHz. Optional penetrations can have an effect on the overall shielding performance. Berry Amendment compliant fabrics available.





Patented Door Closure System

Using two strips of heavy-duty flexible magnet to create a tight conductive seal, allows attenuation levels to exceed -90 dB after over 5000 openings. Single door (US Pat 9,029,714) or double door (US Pat 8,530,756).



IO Filter Plates and Panels

Integrated IO filter plates. Can include filtration for AC Power, Ethernet, USB, SMA, BNC, N-type, Fiber Optics, and more.



Series 300 Frames

Semi-permanent/permanent rectangular heavy-duty extruded aluminum frame.

Standard Features

- Standard size patented double magnet door size: 32" x 70"
- Heavy duty tarp flooring to protect the conductive floor
- Protective tent carry/storage bag
- Shielding Effectiveness Certificate
- Complete assembly instructions and engineering support
- One-year limited warrant

Liners

- Flame retardant /resistant liner
- ESD liner to provide static control

Construction Options

- Exterior covers for outdoor deployment
- Vestibule entrance
- Zero-threshold door
- Custom size door
- Shielded Windows
- Rugged flooring option
- Pelican storage cases
- Shipping cases
- Frame cases

Other

- I/O filter plates
- EMI hardened lights
- In-house or independent IEEE 299 (1-18 GHz testing of completed enclosure)
- Custom engineering/design of enclosure