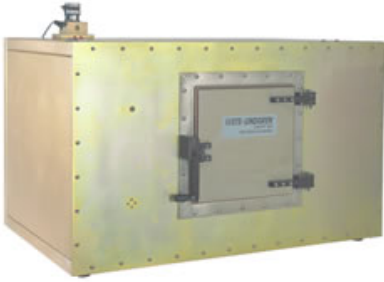


SMART™ REVERB CHAMBERS SMART™ 800 Reverb Test Cell (Single)

SMART™ 800 Reverb Test Cell (Single) is a bench-top version of our larger room-sized reverberation chambers and is ideal for performing radiated immunity and emission measurements on suitably sized devices, using the reverberation method.



SMART™ 800 Reverb Test Cell (Single) is a bench-top version of our larger room-sized reverberation chambers. * The number refers to the lowest operating frequency and for measurements made to the RTCA DO160F/G Standard the operation of the cell can be extended to 800 MHz. All the performance features of our larger chambers field isotropy and homogeneity are retained. The smaller size provides a more convenient and affordable test environment for product design and development applications. The SMART 1000 Mini-Reverb is ideal for performing radiated immunity and emission measurements on suitably sized devices, using the reverberation method. It can also be used for measuring the total radiated power of electronic assemblies and wireless devices at specific frequencies. The low loss characteristics of the chamber ensure a good dynamic range and measurement sensitivity. Applications include testing to IEC 61000-4-21 (immunity, emissions and shielding effectiveness), MIL-STD-461E (immunity), RTCA DO160 F/G (immunity and emissions).

The SMART 800 operates by using its interior surfaces to reflect internally radiated fields. Two rotating 'Z' fold paddles or tuners change the boundary conditions, creating fields with statistical isotropy and field homogeneity over the working volume of the cell. The standard configuration of the cell contains two fixed horn antennas covering the frequency range of 1.0 GHz (800MHz) to 18 GHz. These are mounted internally and located in marked positions. One antenna can be used as the transmit during immunity tests and the other as a receive antenna for making radiated power measurements. An optional pair of antennas covering the 18GHz to the 40GHz range can be installed to extend the operating range. Two rotating paddles are mounted at opposite ends of the chamber to maximize the test volume, these can be operated in the stepped or the stirred mode for maximum flexibility. Immunity and emissions measurements in the SMART 1000 can be automated using the optional TILE! control software.

Key Features

- Automated Measurement with Optional TILE! Software
- Field Uniformity Better than 3dB Over Operating Range
- Compact Bench-Top Design
- Frequency Range of 1.0 GHz to 18 GHz (40 GHz Option)
- Radiated Immunity and Emissions Measurements
 - IEC61000-4-21
 - MIL-STD-461E
 - RTCA DO160 F/G

Specifications

Electrical Specifications

Frequency Minimum: 1.0 GHz (800MHz, 4dB)
Frequency Maximum: 18GHz (40 GHz Option)
Shielding Effectiveness: >80dB at 1GHz
Maximum Input RF Power: 300W 1GHz - 18GHz,
Supply Voltage: 208/230 V
Supply Current: 15A
Plug Type: NEMA or Schuko

Physical Specifications

Cell Dimensions: 1.5m (width) x 1.0m (depth) x 0.8m (height)
Overall Dimensions: 1.55m (width) x 1.26m (depth) x 1.8m (height) including cart
Test Volume: 0.5m x 0.5m x 0.4m
Door Opening: 0.5m x 0.5m
Shielding material: Aluminum, PAN type construction

Other Specifications

- SMART 1000 Mini-Reverb Assembly
- Chamber Calibration from
 - 1.0 GHz to 18 GHz per IEC 61000-4-21 or
 - 800MHz to 18GHz per DO 160G
- Two N-Type Connectors on Side Wall for Installed Horn Antennas
- Two N-Type Connectors on Panel
- Two Double Ridged Horn Antennas (Mounted) 1GHz-18GHz)
- Two Internal Coaxial cables for Horns
- One Vertical, One Horizontal Tuner, with Stepper Motors
- Two-year Warranty