

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

The SMART™ 800 Dual Reverberation Test Cell consists of two identical chamber cavities separated by a common wall.



The SMART™ 800 Dual Reverberation Test Cell's small footprint makes this an ideal solution when space is a limitation as it is a self-contained, freestanding enclosure. The portable chassis makes it an excellent choice for multiple research and development groups since it can be easily moved from one test group to another.

The test cell consists of two identical chamber cavities separated by a common wall. Enclosure shielding is > 80 dB for each cavity and better than 100 dB between cavities, which makes the measurement results stable, repeatable and undisturbed by external interference. For the shielding effectiveness (SE) measurement of gaskets and small enclosures, the Material or Device Under Test (MUT/DUT) can be mounted on the central partition between the two cavities. The shielding effectiveness of the sample is determined by direct measurement of the RF energy that couples from one cavity to the next through the MUT/DUT. SE testing using this technique can be performed following the IEC 61000-4-21, IEEE 1302 or similar standard guidelines.

The test cell uses two vertical tuners (located on each side) which are controlled via a direct RS232 connection and can be operated using the ETS-Lindgren proprietary TILE!™ Windows®-based immunity software. The command mnemonics can also be made available for individual control. The dual cavities of the chamber can be configured to be used for standard emissions and immunity testing per RTCA/DO-160 (F/G), MIL-STD-461 (F/G) and other standards.

Either cavity of the test cell can be used to perform standard emission or immunity measurements. If the test cell is going to be used for these measurements, an additional reverb chamber calibration (optional) will be required to determine the chamber correction factors.

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

Physical Specifications

Overall Exterior Dimensions: 1.9m x 1.1m x 2m including cart

Shielding Material: Aluminum, PAN type construction

Test Volume: 300mm x 300mm x 300mm (11.80" x 11.80" x 11.80") in each cavity