

CHAMBERS SMART 200 REVERB CHAMBERS



SMART 200 REVERB CHAMBERS SERIES

- For full and pre-compliance testing including:
- ISO 11452-11
- EUROCAE/RTCA DO 160G
- FORD FMC 1278
- GMW 3097
- IEC 61000-4-21

ETS-Lindgren's **SMART 200 Reverberation Chambers** are sized to meet the RF immunity testing needs of automotive component manufacturers and test labs, as well as the needs of engineers working on product development with a need for a pre-compliance test capability. The chamber and installed tuner provides an isotropic and homogeneous test environment over a wide operating frequency range, easily meeting the field uniformity requirements of the ISO 11452-11 and other industry and OEM standards from 200 MHz. The Reverb chamber offers several unique features for immunity, emissions and shielding effectiveness testing, the most attractive is the fact that the field strength exhibits the same statistical variation anywhere within the test volume. Assuming proper configuration and a given uncertainty level, field strength results will be the same regardless of where in the room they are measured, with the layout of the EUT having minimal influence on the effect on those measurements. Another benefit of the enclosed chamber cavity, is the efficient use of available RF power in the chamber for the generation of the test field level.

SMART chambers are well suited to simulate the complex EM environments of cavities, such as computer rooms, medical equipment rooms, aircraft avionics bays, and vehicle engine compartments, simulating all wave polarizations and incidence angles during a full test sequence. The most recent edition of the automotive standards introduces procedures that improves test efficiency, reduces measurement time and extends the operating range of the chamber, with closed loop leveling, high speed stirring and low frequency excitation among the options.

ETS-Lindgren understands reverberation chamber technology, and can design a chamber to meet your specific needs. We can work with you to determine the correct chamber volume for achieving the desired frequency range, select interior finishes to optimize mode density and Q-bandwidth, as well as recommend the right antenna and amplifier combination for field strength requirements.

Product Configuration

- Z3030 tuner
- One horizontal, or vertical tuner
- Tx and Rx antennas
- TILE! Control Software

Options

- 5902 - Standard speed tuner
- 5903 - High speed tuner
- 5904 - Slow speed tuner
- Integrated over bench stripline
- Full instrumentation package

Electrical	
Measurement Frequency Range	200 MHz to 18 GHz
Physical	
Chamber Size (Nominal Interior)	4.83 m x 3.61 m x 3.05 m (15.85 ft x 11.84 ft x 10.0 ft)
Overall Dimensions	4.86 m x 3.64 m x 3.35 m (15.97 ft x 11.97 ft x 11.0 ft)
Door Size	1.21 m x 2.13 m (4.0 ft x 7.0 ft)
Test Volume	2.2 m x 1.6 m x 1.5 m (7.2 ft x 5.3 ft x 4.9 ft)