CHAMBERS SMART 700 MINI-REVERB CELL



SMART 700 MINI-REVERB CELL SERIES

- **For Full and Pre-Compliance Testing Including:**
- **MIL-STD 461G**
- **EUROCAE/RTCA DO160F/G**
- **IEC 61000-4-21**
- **Automated Measurement with Optional Software**
- **Mobile self-contained test platform**
- **Built in test antennas and cables**
- **Single tuner design for tuned and stirred mode operation**
- **Factory calibrated**

ETS-Lindgren's SMART (Statistical Mode Averaging Reverberation Test-Site) Chambers are a mobile floor standing version of our larger room-sized reverberation chambers. The part number refers to the lowest operating frequency following the procedures described in the relevant standards. All the performance features of our larger chambers including field isotropy and homogeneity are retained with the smaller chamber volume optimized for high field strength testing above 700 MHz. The smaller size provides a more convenient and affordable test environment for product design and development applications, especially suited to the high field levels defined in RTCA DO 160G. The SMART 700 chamber 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 good dynamic range and measurement sensitivity. Applications include testing to IEC 61000-4-21 (immunity, emissions and shielding effectiveness), MIL-STD-461G (immunity), RTCA DO160 F/G (immunity and emissions). The SMART 700 operates by using its interior surfaces to reflect internally radiated fields. A single rotating 'Z' fold tuner changes 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 700MHz (4dB field uniformity) 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 reference receive antenna or 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 of the chamber. The tuner is mounted vertically at the back of the chamber to maximize the test volume, and can be operated in the stepped or the stirred mode for maximum test flexibility. Immunity and emissions measurements in the SMART 700 can be automated using the optional TILE! control software. For high field strength measurements up to 3000 V/m, a custom set of antennas can be provided.

Standard Configuration

- Compact Mobile Test Chamber for Imminity

Electrical	
Measurement Frequency Range	700MHz - 18GHz
Physical	
Overall Dimensions	2.2 m x 1.3 m x 2 m high (84.7 in x 50.2 in x 79.1 in)
Chamber Size (Nominal Interior)	2 m x 1.2 m x 1.5 m high (78.9 in x 47.2 in x 59.1 in)
Door Size	1.35 m x 1 m (53.15 in x 37.37 in)
Connector Panel / One Sde Wall Panel	68 cm x 38 cm (26.8 in x 14.96 in)
Test Volume	0.9 m x 0.6 m x 0.6 m

Information presented is subject to change as product enhancements are made.
Contact ETS-Lindgren Sales Department for current specifications.

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