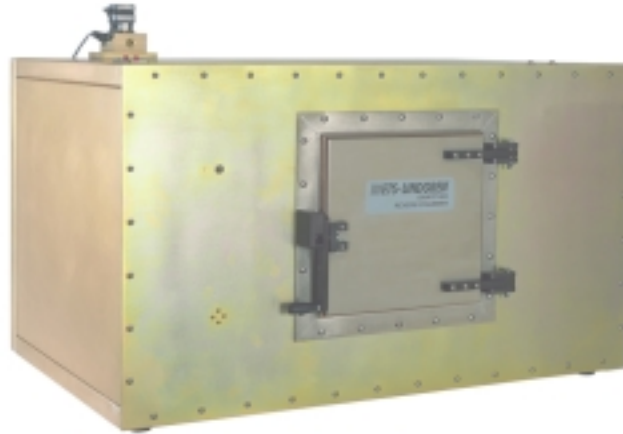


Test Cells  
**SMART™ 1000**  
**Mini-Reverb Cells**

## FEATURES

- Frequency Range of 1.0 GHz to 40 GHz
- Field Uniformity Better than 3 dB Over Operating Range
- Radiated Immunity and Emissions Measurements
  - IEC 61000-4-21
  - MIL-STD-461E
- Automated Measurement with Optional Software
- Fast Measurement Time
- Compact Bench-Top Design
- Two Year Warranty



ETS-Lindgren's SMART 1000 Mini-Reverb Cell

**The SMART 1000 Mini-Reverb Cells** is a bench-top version of our larger room-sized reverberation chambers. All the performance features of our larger chambers—field isotropy and homogeneity—are retained. However, 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 measuring the total radiated power of electronic assemblies and wireless devices at specific frequencies. The low loss characteristics ensure a good dynamic range and measurement sensitivity. Applications include testing to IEC 61000-4-21 (immunity, emissions and shielding effectiveness), and MIL-STD-461E (immunity and emissions).

The SMART 1000 operates by using its interior surfaces to reflect internally radiated fields. Two rotating paddles or tuners change the boundary conditions, creating fields with statistical isotropy and field homogeneity over the cell's working volume. Two fixed horn antennas covering the frequency range of 1.0 GHz to 40 GHz are mounted internally for making total radiated power measurements. Two rotating paddles are mounted at opposite ends of the chamber to maximize the test volume.

Immunity and emissions measurements in the SMART 1000 can be automated using two optional software packages, SMARTImm and SMARTEmi.

## Standard Configuration

- SMART 1000 Mini-Reverb Assembly
- One vertical, one horizontal tuner, with stepper motors
- Two double ridged horn antennas (mounted)
- Chamber calibration from 1.0 GHz to 40 GHz per IEC 61000-4-21
- Two Year Warranty
- One Type N and one Type K connector for horns

## Options

- SMARTImm Immunity software
- SMARTEmi Emissions software
- Additional N, SMA, 2.9, 3.5, or Type K connectors

### USA:

Tel +1.512.531.6400  
Fax +1.512.531.6500

### FINLAND:

Tel +358.2.8383.300  
Fax +358.2.8651.233

### UK:

Tel +44.(0)1438.730700  
Fax +44.(0)1438.730751

### FRANCE:

Tel +33.1.48.65.34.03  
Fax +33.1.48.65.43.69

### CHINA:

Tel +8610.8275.5086  
Fax +8610.8275.5537

### JAPAN:

Tel +81.3.3813.7100  
Fax +81.3.3813.8068

### ONLINE:

info@ets-lindgren.com  
www.ets-lindgren.com

### Electrical Specifications

MODEL	FREQUENCY RANGE	FIELD UNIFORMITY OVER FREQUENCY	SHIELDING EFFECTIVENESS	POWER REQUIREMENTS (MOTORS)
SMART 1000	1.0 GHz - 40 GHz	better than 3 dB	80 dB	120 - 250 VAC, 50/60 Hz

### Physical Specifications

MODEL	OUTER DIMENSIONS L X W X H	TEST VOLUME DIMENSIONS L X W X H	DOOR DIMENSIONS L X W X H
SMART 1000	1.1 m x 0.7 m x 0.6 m 3.6 ft x 2.3 ft x 2.0 ft	300 mm x 300 mm x 200 mm 11.8 in x 11.8 in x 7.9 in	300 mm x 300 mm 11.8 in x 11.8 in