

**FEATURES:**

- **Non-Hygroscopic Substrate**
- **Ultra Broadband Frequency Range 30 MHz - 40 GHz**
- **10m High Performance Chamber Applications**
- **Numerically Optimized Design Achieves Superior Performance**
- **Greater Measurement Accuracy Reduces EMI Suppression Costs**
- **200 V/m Power Handling Capability**
- **Fire Retardant**



*ETS-Lindgren's FS-1500H Anechoic Absorber*

**ETS-LINDGREN'S FERROSORB**

**FS-1500H** is a numerically optimized hybrid that combines high performance carbon-loaded foam absorber with precision-manufactured ferrite tile, and is designed specifically for use in 10m EMC chambers.

This ultra broadband composite achieves superior levels of absorption and power-handling capability in a space-saving profile which is significantly less than the depth of traditional foam-only products.

FS-1500H is ETS-Lindgren's top-of-the-line FerroSorb product. It is specifically designed to be a cost-effective solution for EMC chamber applications that call for very high performance requirements. Chambers designed with FerroSorb FS-1500H will exceed the +/- 4 dB normalized site attenuation requirements specified in ANSI C63.4 and

CISPR 16-1-14. With an optimized chamber design, site attenuation performance of +/- 3 dB deviation from theoretical normalized site attenuation is achievable. This results in improved measurement accuracy which can translate into significant savings by reducing a product's EMI suppression costs. Other applications include IEC 61000-4-3 and MIL-STD 461E immunity testing.

**FEATURES**

ETS-Lindgren absorbers use a new fire-retardant chemical formula that is non-hygroscopic. As a result, the absorber is not affected by moisture and will maintain its mechanical and RF performance over the life of the product.

FerroSorb FS-1500H has a unique composite construction that combines the best of ferrite tile technology with

high performance anechoic absorber to achieve an ultra broadband operating frequency of 30 MHz to 40 GHz.

Absorption/reflectivity performance of FS-1500H is superior to dielectric material measuring up to twice its depth.

FS-1500H has excellent power handling capability for today's immunity standards testing, and can safely handle continuous exposure to fields up to 200 V/m.

The reduced size of the product, as compared to traditional foam-only absorber, means that overall room size can be reduced as well, resulting in significant project cost savings.

FerroSorb FS-1500H is fire retardant and meets the standards of NRL 8093 Tests 1, 2 & 3,

TI #2693066, MIT MS-8-21, UL 94, and DIN 4102-B2: Tests for Flammability.

Before absorbers are placed in service, they are serialized and their reflectivity performance is measured using non-destructive testing. In the critical low frequency range of

30 MHz to 500 MHz, a vertical coaxial waveguide is utilized as specified in IEEE 1128. Testing at higher frequencies is performed using the NRL Arch technique. These precise tests assure quality of the complete absorber, resulting in optimized chamber performance.

**APPLICATIONS**

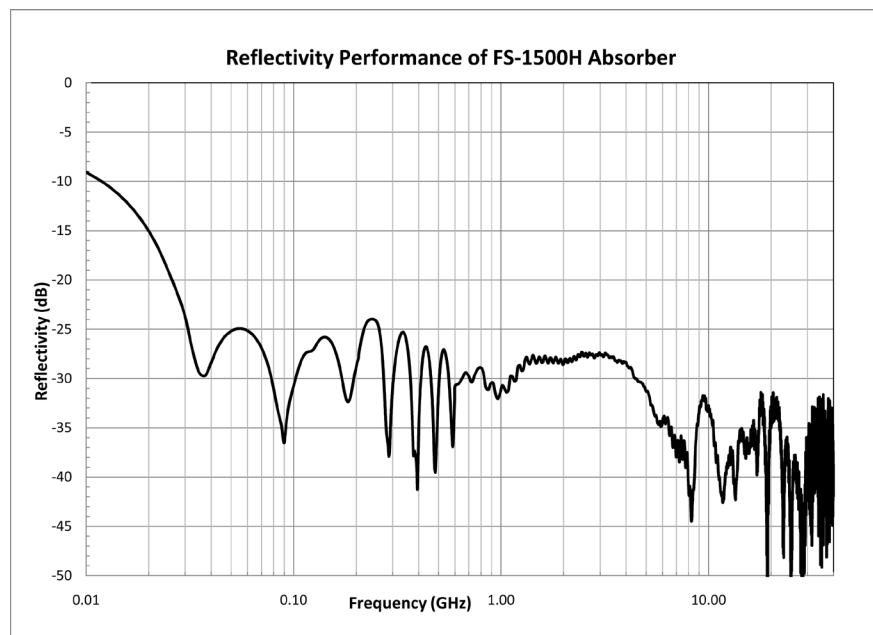
- IEC 61000-4-3
- ANSI C63.4
- CISPR 16-1-4
- MIL-STD 461

**Electrical Properties**

MODEL #	FREQUENCY	POWER HANDLING
FS-1500H	30 MHz - 40 GHz	200 V/m CW

**Physical Properties**

MODEL #	SIZE	NOMINAL HEIGHT	NOMINAL WEIGHT PER PANEL
FS-1500H	60.0 cm x 60.0 cm 23.6 in. x 23.6 in.	150.0 cm 59.1.0 in.	5.9 kg/m <sup>2</sup> 13.0 lb/ft <sup>2</sup>



*FS-1500H Typical Measured Performance*