Customized indoor NEMP test systems

Montena designs bespoke NEMP simulators for integration into existing or new semi-anechoic EMC chambers. The radiating line is terminated against the chamber wall, between the existing absorbers. This type of construction allows to maximize the test volume in 5-meter and 10meter compliant EMC chambers, as well as in larger chambers.

The NEMP test system is designed to assess the immunity of electronic equipment and subsystems to an electromagnetic pulse in accordance with the MIL-STD 461 RS105 and MIL-STD 464 test procedures (NEMP: nuclear electromagnetic pulse).



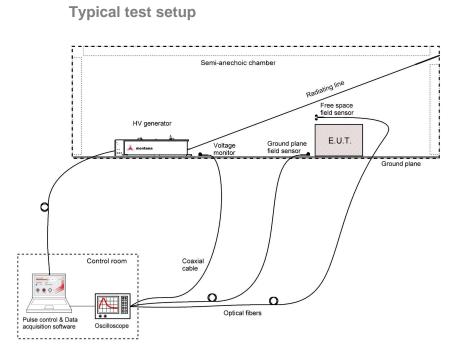
Montena's Marx generator produces a high voltage pulse, that propagates along the radiating line mounted over a conductive ground plane. The electromagnetic field pulse that is generated under the line is vertically polarised and can exceed 50 kV/m in the specified test volume. The system and the related pulse measurement equipment are controlled by software through fibre optic links. The system is designed for easy assembly and disassembly.

| SPECIFICATIONS | |
|-------------------------------|--|
| Туре | NEMP-WM |
| Standards | MIL-STD 461 E/F/G RS105, MIL-STD 464 |
| Dimensions of the test volume | tailored to the dimensions of the chamber |
| Peak electric field strength | \geq 50 kV/m at full charging voltage |
| Electric field polarisation | vertical |
| Pulse rise time (10 – 90%) | 2.3 ns ± 0.5 ns |
| Pulse duration (50 – 50%) | 23 ns ± 5 ns |
| Line structure | bounded wave line / TEM mode |
| Generator configuration | Marx with adjustable peaking circuit |
| Power rating | 90 – 264 Vac / 47 - 63 Hz / one phase / < 500 VA |
| Generator dimensions | 266 x 62 x 74 cm (L x H x W) |
| Generator weight | 250 kg |
| System dimensions | tailored to the dimensions of the chamber |

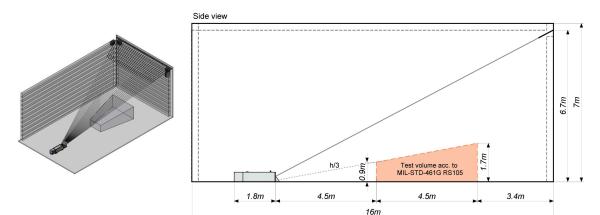




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Example of integration into an EMC chamber



Ordering information

| TYPE | DESCRIPTION |
|---------|---|
| NEMP-WM | Customized indoor NEMP test system in accordance with the MIL-STD 461 versions E, F and G / RS105, for a test amplitude of up to 50 kV/m. |

D-dot ground plane sensor to measure fast electric field pulses

D-dot free-space sensor to measure fast electric field pulses

to connect the field sensors to the measurement equipment

Pulse measurement and processing software application,

B-dot free-space sensor to measure fast magnetic field pulses

B-dot ground plane sensor to measure fast magnetic field pulses

DESCRIPTION

Balun for free-space sensors

Shielded analog fiber-optic transmission,

lifetime license for installation on one PC.

Related products / accessories

TYPE

SGE3-5G

SGM2G

SFE3-5G

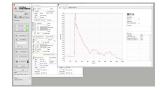
SFM2G

BL3-5G

MOL2000T2

PULSELab







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