

NEMP radiated susceptibility test system, H = 500 cm

The test system NEMP500 is designed to assess the immunity of electronic equipment and subsystems to an electromagnetic pulse in accordance with the MIL-STD 461 RS105 test procedure (NEMP: nuclear electromagnetic pulse).

Montena's Marx generator produces a high voltage pulse, that propagates along a 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 test volume. The system and the related pulse measurement equipment are controlled by software through fibre optic links. The system has been designed for easy assembly and disassembly and can be operated both, indoor ideally in a semi-anechoic chamber, or outdoor when the weather is good.

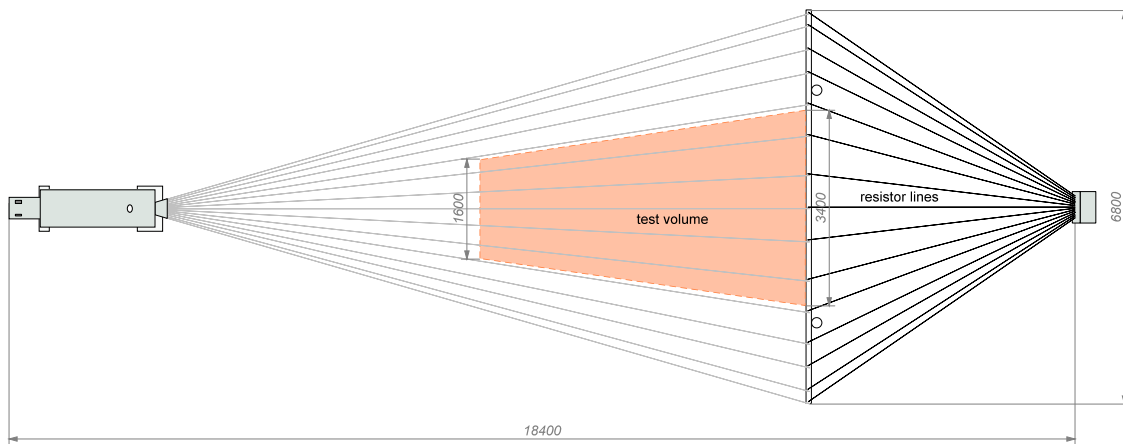
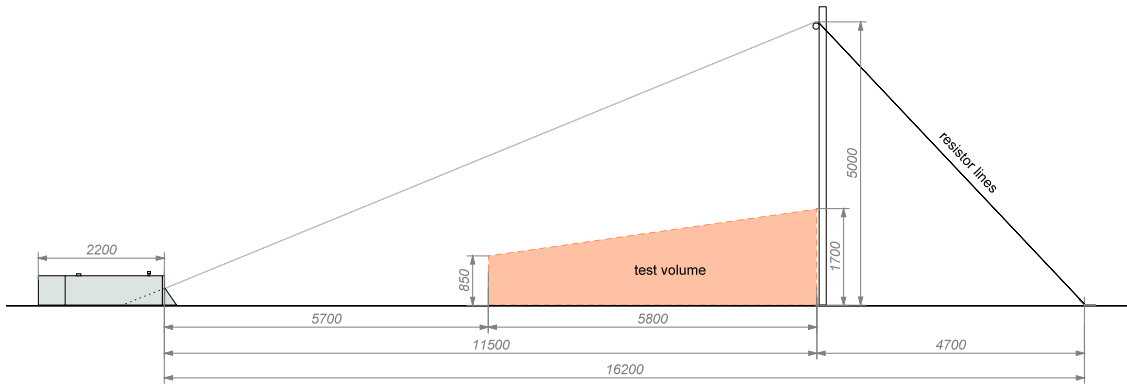


SPECIFICATIONS

Type	NEMP500
Standards	MIL-STD 461 E / F / G, test procedure RS105
Dimensions of the test volume	see drawing on next page
Peak electric field strength	≥ 50 kV/m at full charging voltage
Electric field polarisation	vertical
Pulse rise time (10 – 90%)	2.3 ns \pm 0.5 ns
Pulse duration (50 – 50%)	23 ns \pm 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	188 x 60 x 67 cm (L x H x W)
Generator weight	about 150 kg
System dimensions	18.4 x 5 x 6.8 m (L x H x W)

System dimensions

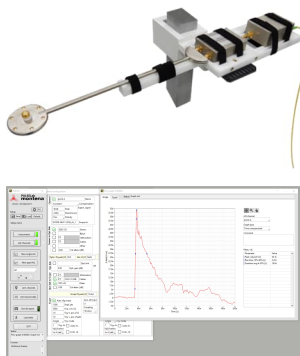
All dimensions are in millimeters.



Ordering information

TYPE	DESCRIPTION
NEMP500	Transportable NEMP test system according to MIL-STD 461 versions E, F and G / RS105, height of the radiation line 5 m, for a test amplitude of up to 50 kV/m.

Related products / accessories



TYPE	DESCRIPTION
GMRL500	Material to build a temporary ground plane, consisting of a special metallic mesh and the related assembly material
SFE3-5G, SGE3-5G	D-dot sensors to measure the electric field pulse
SFM2G, SGM2G	B-dot sensors to measure the magnetic field pulse
BL3-5G	Balun for free field sensor
MOL2000T2 or MOL3000	Shielded fibre optic transmission, to connect the field sensors to the measurement equipment
SB3G	Shielded enclosure, for the protection of the oscilloscope
PULSELab	Pulse measurement and processing software application, lifetime license for installation on one PC.
...	Other measurement accessories such as field sensor mounting kits, dielectric masts, coaxial cables, etc. are proposed too.