

# 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.

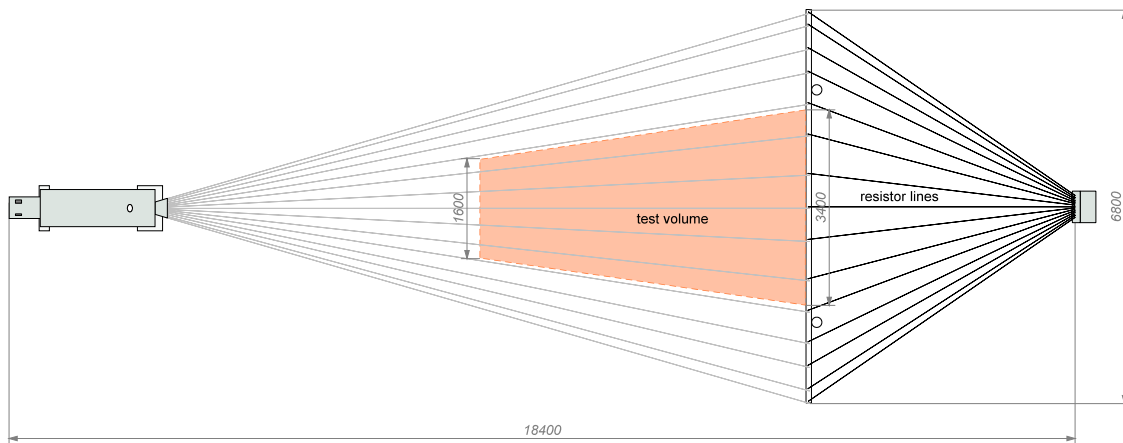
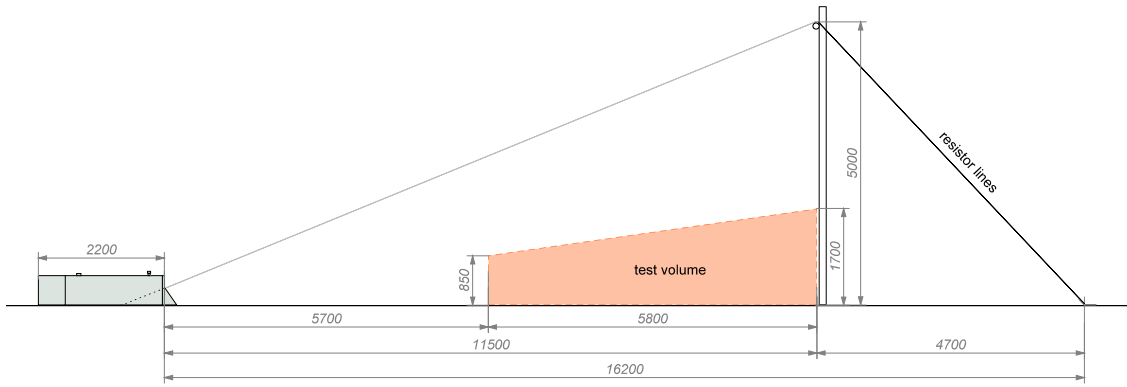


## SPECIFICATIONS

Type	NEMP500
Standards	MIL-STD 461 E / F / G / H, test procedure RS105
Dimensions of the test volume	see drawing on next page
Peak electric field strength	$\geq 50$ 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 / < 70 VA / fuse 10 AT
Generator dimensions	193 x 60 x 60 cm (L x H x W)
Generator weight	about 150 kg
System dimensions	18.4 x 5 x 6.9 m (L x H x W)

## System dimensions

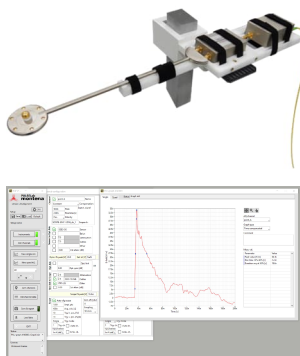
All dimensions are in millimeters.



## Ordering information

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

## Related products / accessories



TYPE	DESCRIPTION
<b>GMRL500</b>	Material to build a temporary ground plane, consisting of a special metallic mesh and the related assembly material
<b>SFE3-5G, SGE3-5G</b>	D-dot sensors to measure the electric field pulse
<b>SFM2G, SGM2G</b>	B-dot sensors to measure the magnetic field pulse
<b>BL3-5G</b>	Balun for free field sensor
<b>MOL2000T2 or MOL3000</b>	Shielded fibre optic transmission, to connect the field sensors to the measurement equipment
<b>SB3G</b>	Shielded enclosure, for the protection of the oscilloscope
<b>PULSELab</b>	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.