Generators

Montena develops and manufactures high voltage pulse generators for NEMP (Nuclear Electromagnetic Pulse) tests according to MIL-STD-461 E/F.

These generators use direct capacitive circuits or Marx technology. Peaking circuits are often used to increase the impulse rise time.

All generators have a remote control unit providing indications and settings of the charging voltage, gas pressures and pulse triggering as well as an interlock switch for safety. USB and RS232 interfaces are available for control software applications.

Montena NEMP generators are designed to be connected to radiation lines such as bounded wave transmission lines or GTEM-cells.

REFERENCE	CHARGING VOLTAGE	WAVEFORM	LINE IMPEDANCE	REMARKS
EMP80K-2-23	80 kV	Double exponential Rise time : 2.3 ± 0.5 ns Duration time : 23 ± 5 ns	110 Ω	Direct discharge circuit
EMP170K-2-23	170 kV			Marx + peaking circuit
EMP230K-2-23	230 kV			
EMP450K-2-23	450 kV			
EMP670K-2-23	670 kV			
EMP800K-2-23	800 kV			
EMP80K-2-23-50	80 kV		50 Ω	To be connected to a GTEM-cell
Generators for MIL-STD-461 version D are available upon request				

- → Technology and design scales up to a charging voltage of 1.2 MV
- → Interlock switch and automatic capacitor discharge for high safety requirements
- → Compact and robust construction
- → Possible recycling of the SF_6 gas
- → Proven performance and reliability with many generators installed worldwide

Montena design can be adapted to customers' requirements to fulfil other standards, for other fields of application or for the refurbishment of existing NEMP test installations.