

Surge Test Generator PG 24-2500

Surge Voltage

1.2 / 50 μ s
0.5 - 24 kV

Surge Current

8 / 20 μ s
0.2 – 12 kA

**According to**

IEC 61000-4-5 : SURGE
2014 24kV, 12kA

Picture with option safety test cover PA504

The Surge Test Generator PG 24-2500 is a combined impulse current-/impulse-voltage generator which, for high-impedance loads, $R_L > 100\Omega$, delivers a standard impulse voltage with waveform 1.2/50 μ s and, for short-circuited output, a standard impulse current with waveform 8/20 μ s, as defined by IEC 60. The peak value of the pulse output voltage can be adjusted from 0.5 kV to 24 kV. The peak short circuit current amplitude is 12 kA.

The generator is designed for dielectric testing of components and systems or direct coupling to cable shields and shielding enclosures. PG 24-2500 consists of a microprocessor controlled control- and monitoring unit and a high-voltage unit, which contains the energy storage capacitor, the high-voltage switch and the pulse forming network.

PG 24-2500 features a microprocessor controlled user interface and a 7" touch screen unit for ease of use. The microprocessor allows the user to execute either standard test routines or a "user defined" test sequence. The test parameters, which are shown on the built in display, are easily adjusted by means of touch screen. A standard USB port provides the ability to print a summary of the test parameters to a USB stick.

Moreover, all generator functions may be computer controlled. The software program PG-REMOTE allows full remote control of the test generator via fiber optic Ethernet interface as well as documentation and evaluation of test results, accordingly to the IEC 17025. To record definite impulses, it is equipped with an Impulse Recording Function (IRF).

Options	PG24-2500
Software CE-REMOTE Test, for remote control (Windows)	
With Impulse Recording Function (IRF)	
Incl. 5 m fibre optic cable and PC Ethernet interface	
Safety test cover PA 504	
mounted on the top	430 * 280 * 500 mm ³
Limit switch connected to the safety interlock loop	
Test space: W*H*D	

Technical specification	PG24-2500
Mainframe	
Microprocessor controlled touch panel	7", capacitive
Optical Ethernet Interface for remote control of the generator	optional
Interface for saving reports	USB
External trigger input/ output	Switch/ 10 V
Coupling-/decoupling network for power supply lines	L1, N, PE
Nominal voltage, nominal current ac/dc	250 V, 16 A ≈ / 16 A =
Coupling impedance	18 μF / 9μF+10Ω
Connector for external safety interlock loop	24 V =
External red and green warning lamps	24 V=, 40 mA
Mains power	230V, 50/60 Hz
Dimensions of desk top case W * H * D	556*620*800 mm ³
Weight	115 kg
Test voltage (open circuit condition)	0.5 - 24.0 kV ± 10 %
Waveform acc. to IEC 60060	1.2 / 50 μs ±30/ ±20 %
Test current (short circuit condition)	0.2 - 12 kA ± 10 %
Waveform acc. to IEC 60060	8 / 20 μs ± 20%
Polarity of output voltage/current, selectable	pos/ neg/ alt
Maximum stored energy	2500 Joule
Charging time for max. charging voltage	< 40 s
HV output isolated from ground	HV-OUT
Mains synchronous triggering, phase shifting, digitally selectable	0 - 359°, step 1°
Display of peak values of impulse voltage and impulse current	build in
Monitor output for pulse output voltage	ratio = 2000 : 1 ± 5%
Monitor output for pulse output current	12 V ≡ 12 kA ± 5%
Ground rod, for manual security earthing of the HV output	build in