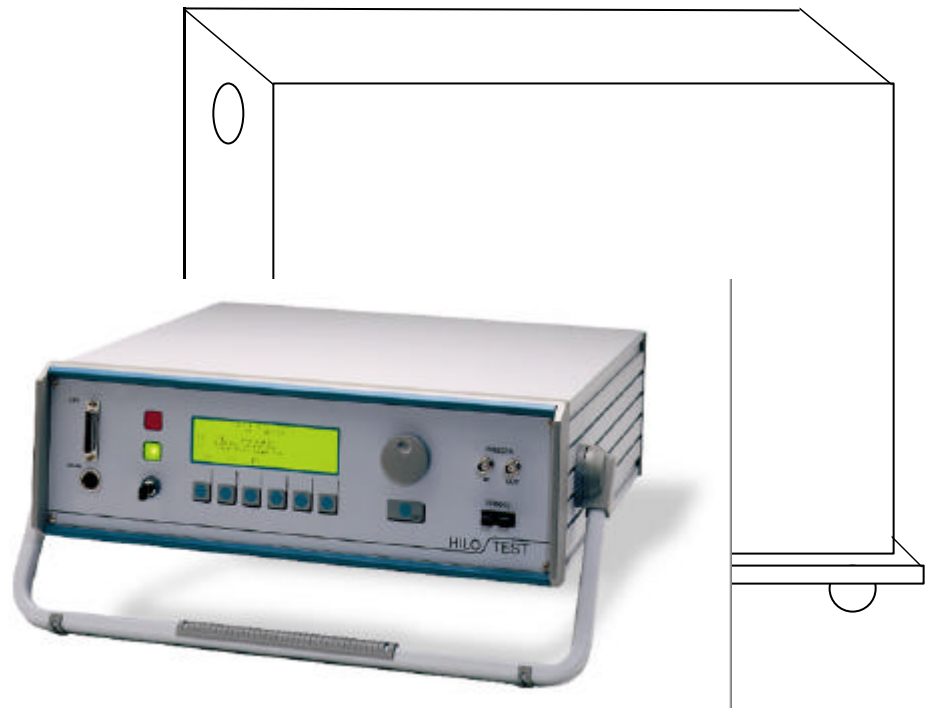


HV - PULSE GENERATOR

PG 100-500

PG 140-1000



1.2 / 50 μ s

**1 kV - 100 kV /
2 kV - 140 kV**

Surge voltage test

High-voltage pulse generators PG 100-500 and PG 140-1000 create standard impulse voltages with waveform 1.2 / 50 μ s acc. to IEC 60. The generators simulate surges caused by switching of inductive loads, power system switching, lightning strokes etc.

They are designed for testing of impulse dielectric strength of electrical insulations, electrical components, air-and surface flashover gaps and electrical installations and systems. They consist of a main frame and a high-voltage unit, which contains the HV-charging unit and the pulse forming, network. The HV-unit is connected to the main frame by a cable, 5 m long.

The peak value of the test voltage is continuously adjustable from 1 kV to 100 kV or 140 kV respectively. Positive and negative polarity of output voltage can be selected. A built-in voltage divider allows monitoring of the impulse output during testing. The peak value of the output voltage is shown on the display after each pulse.

The mainframe features a microprocessor controlled user interface and display 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 the rotary encoder. A standard parallel interface provides the ability to print a summary of the test parameters whilst testing is being carried out.

Moreover, all generator functions may be computer controlled via the isolated optical interface. The software program IPG-TEST allows full remote control of the test generator and documentation and evaluation of test results.

The generator excels by its compact design, simple handling and precise reproducibility of test impulses.

Technical specification:
PG 100-500 / 1000
Mainframe:

Microprocessor controlled LCD module		8*40 characters
Parallel printer interface for on-line documentation		25-way 'D' connector
Optical-interface for remote control of the generator		built-in
External Trigger input		10 V at 1 k Ω
External Trigger output		10 V at 1 k Ω
Diagnostic input for monitoring of the test device		four channels, 5 V - Level
Connectors for external safety interlock loop (not with Opt. 1) 24 V =		
and external red and green warning lamps acc. to VDE 0104 230 V, 60 W		
Mains power		230 V, 50/60 Hz
Dimensions:	19" desk top case W * H * D	450*180*425 mm ³
Weight		16.5 kg

HV-Generator section:

Peak value of impulse output voltage, adjustable, $\pm 5\%$		1 - 100 kV	- 140 kV
Waveform of impulse output voltage, acc. to IEC 60		1.2/50 μ s $\pm 30\%/20\%$	
max. stored energy		500 J	1000 J
Energy storage capacitor	C _S	0.1 μ F	0.1 μ F
Discharge resistor	R _E	700 Ω	700 Ω
Series resistor	R _S	200 Ω	200 Ω
Load capacitor	C _B	0.002 μ F	0.002 μ F
Damping resistor in series to the HV-output		50 Ω	50 Ω
Polarity of impulse output voltage, selectable (by manually reversing of the HV-rectifier unit)		pos./neg.	pos./neg.
Charging time		5 sec	10 sec
Triggering:	a) manual	push button	
	b) external trigger input	10 V / 1 k Ω	
	c) internal, automatically	test program	
CURRENT SENSE		built-in	
threshold value, selectable		2 - 25 mAs	2 - 25 mAs
range of operation, impulse voltage setting:		10 -100 kV	10 - 140 kV

OPTION 1: Software IPG-TEST for remote control of the generator,
incl. light guide, I = 5 m, and PC-Interface.