

# PG 12-400

## Impulse Wave Generator



### Acc. to

**IEC60060-1**

**IEC61010-**

**IEC 60664-1**

High-Voltage Pulse Generator PG 12-400 generate standard impulse voltages with waveform 1.2 / 50  $\mu$ s acc. to IEC 60060. It is designed for testing impulse dielectric strength of components, insulations, air- and surface flash-over gaps acc. to IEC.

The peak value of the test voltage is continuously adjustable from 0.2 - 12 kV. Positive or negative polarity of the output voltage can be selected. A built-in voltage divider 1000:1 allows monitoring of the impulse output waveform during testing.

The generator possess a high-voltage output with a standard source impedance of 12 $\Omega$ /40 $\Omega$ /200 $\Omega$  or 500 $\Omega$ . The HV output terminal is located beyond a dielectric cover with safety interlock. The transparent test cabinet prevents accidental contact with live threatening parts of the test object and allows observation of the test object during testing.

The generator output possesses a current monitor detecting breakdown or flashover of the test object. The threshold of the current monitor is adjustable.

The generator excels by its compact design, simple handling and precise reproducibility of test impulses. It 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. A standard USB port provides the ability to print a summary of the test parameters to a USB stick.

The software program PG-REMOTE allows full remote control of the test generator via Ethernet light guide 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) Moreover all generator functions may be computer controlled via the isolated optical interface.

Options		PG 12-400
<b>PC software for remote control</b>		
PG Remote software test package, running under Microsoft Windows, for the external control of the device		
( XP, WIN7, WIN10 ) includes 5 m long fibre optic cable and Ethernet PC Interface		
<b>Test cabinet</b>		
Test adapter with safety cabinet for component testing		
Typ PA 503, Abmessungen B * H * T		400 * 140 * 300 mm <sup>3</sup>
Typ PA 505, Abmessungen B * H * T		400 * 250 * 400 mm <sup>3</sup>
Version ohne Sicherheitsprüfhaube		

TECHNICAL SPECIFICATIONS		PG 12-400
<b>Mainframe</b>		
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
Connector for external safety interlock loop		24 V =
and external red and green warning lamps acc. to VDE 0104		24 V=, 40 mA
Mains power		230V, 50/60 Hz
Dimensions: desk top case W * H * D		450*330*500 mm <sup>3</sup>
Weight		25 kg
<b>SURGE acc.to IEC 60060-1</b>		
Test voltage, ( open circuit condition)		0.2 – 12 kV ± 5 %
Waveform acc.to IEC 60060-1		1.2 / 50 µs ± 30/20 %
Polarity of output voltage/current, selectable		pos/neg/alt
maximum stored energy		360 Joule
Energy storage capacitor	Cs	5 µF
Resistor in series to the output	Rs	12Ω opt. 40Ω/200Ω/500Ω
Optional other serial resistors	Rs	available
Trigger :		
a) manual		Push button
b) external Trigger input		Switch
c) internal, automatic, adjustable via test procedure		1 - 1000 pulses
Repetition time		10-1000 s
Mains synchronous triggering, phase shifting, digitally selectable		0 - 360 °, Step 1°
Display of peak values of pulse voltage and Ixt		built-in
<b>CURRENT SENSE</b>		
Impulse voltage divider, built-in		ü = 1000 : 1 ± 5 %
<b>Accessories</b>		
power cable, turn key, HV-cable, 1m, instruction manual		