

## IPG 2025/ IPG 2436

## **HV - IMPULSE GENERATOR**

Surge testing 1.2/50µs 2.5 kV - 20 kV / 2.5 kV - 24 kV



Picture: incl. Option PA 503

According to	
IEC 60664	Testing impulse dielectric strength of components, insulations, air-
VDE 0110	and surface flash-over gaps
VDE 0411	
VDE 0420	
IEC 60335 : 2010	Insulation test of inductors and coils

The HV - Impulse generators IPG 2025 and IPG 2436 create standard impulse voltages with waveform 1.2 / 50  $\mu$ s acc. to IEC 60060. They are designed for testing impulse dielectric strength of components, insulations, air- and surface flash-over gaps according to the standards.

The peak value of the test voltage is continuously adjustable from 2 - 20 kV or 2 - 24 kV. Positive or negative polarity of output voltage can be selected. A built-in voltage divider 1000:1 allows monitoring of the impulse output waveform during testing.

The generators possess two high-voltage outputs with different source impedance. The HV output terminals are located beyond a dielectric cover with safety interlock. The transparent test cabinet prevents accidental contact with live 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.

Moreover all generator functions may be computer controlled via the isolated optical interface. The software program IPG-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).

Options	IPG 2025 IPG 2436				
PROTECTIVE COVER ON THE EQUIPMENT TOP					
With safety interlock switch	See figure				
connected to the safety interlock loop,					
red and green warning lamps installed,					
acc. to VDE 0104, built-in.					
Type PA 503, Dimensions: W * H * D	400 * 140 * 300 mm <sup>3</sup>				
Type PA 505, Dimensions: W * H * D	400 * 250 * 400 mm <sup>3</sup>				
Software IPG-REMOTE, for remote control					
Or description of remote control commands					
With Impulse Recording Function (IRF)					
( XP, WIN7, WIN10 ) incl. 5m long light guide and PC Ethernet interface					
Version without protective cover, current shunt Rm = $1\Omega$ ,					
BNC for measuring on the back					



TECHNICAL SPECIFICATIONS	IPG 2025	IPG 2436
Mainframe		
Microprocessor controlled touch panel	7" ca	nacitive
Optical Ethernet Interface	7", capacitive Optional	
for remote control of the generator	Ор	lioriai
Interface for saving reports	USB	
External Trigger input/ output	Switch/ 10V	
Connector for external safety interlock loop	24 V=	
External red and green warning lamps	24 V=, 40 mA	
Mains power	90V – 264V / 50/60 Hz	
Dimensions of desk top case W * H * D	450*180*500 mm <sup>3</sup>	
Weight	18kg	
HV-Generator section	,	
Peak value of impulse output voltage, adjustable, ± 5 %	2.5 - 20 kV	2.5 - 24 kV
Waveform of impulse output voltage,	1.2/50 µs ±	30 % / 20 %
acc. to VD 0433, IEC 60060		T
Max. stored energy	25 Joule	36 Joule
Energy storage capacitor Cs	0.125 μF	
Resistor in series to the output HV1 Rs1	500Ω	
Resistor in series to the output HV2 Rs2	Standard 200 $\Omega$ (opt. 40 or 50 $\Omega$ )	
Output polarity, selectable	pos / neg / alt	
Trigger:		
a) manual	Push button	
b) external Trigger input	Switch	
c) internal, automatic, adjustable via test procedure	1 - 1000 Impulse	
Repetition time, selectable	5 - 1000 s	
CURRENT SENSE	hu	ilt-in
Threshold value, selectable		1 - 1500 µAs
Impulse voltage divider, built-in	1000:1 ± 2 %	
Mains synchronous triggering, phase shifting, digitally selectable	0 - 359°, step 1°	
HV output, HV-OUT	HV Plug	
Accessories: power cable, turn key, instruction manual		