

IPG 620/ IPG 1050/ IPG 1272

HV - IMPULSE GENERATOR

Surge testing 1.2/50 μ s

0.3 kV - 6 kV /

0.3 kV - 10 kV /

0.3 kV - 12 kV



Figure: incl. option PA503

According to

CCITT-K22

ITU-T/K44

IEC 60

HV - Impulse generators IPG 620, IPG 1050 and IPG 1272 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 components, insulation, air-and surface flash-over gaps as well as for testing surge immunity of devices and systems acc. to CCITT - K22, ITU-T-K44.

The peak value of the test voltage is continuously adjustable from 0.3 kV to 6 / 10 / 12 kV respectively. Positive, negative and alternat polarity of output voltage can be selected. A built-in voltage divider 1000:1 allows monitoring of the impulse output waveform 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 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) Moreover all generator functions may be computer controlled via the isolated optical interface.

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Options	IPG 620	IPG 1050	IPG 1272
PROTECTIVE COVER ON THE EQUIPMENT TOP			
With safety interlock switch, connected to the safety interlock loop, red and green warning lamps installed acc. CDE 0104	See figure		
Type PA 503, Dimensions W * H * D	400 * 140 * 300 mm ³		
Type PA 505, Dimensions W * H * D	400 * 250 * 400 mm ³		
Software IPG-REMOTE, for remote control			
With Impulse Recording Function (IRF)			
(XP, WIN7, WIN10) incl. 5m long light guide and PC Ethernet interface			
Version without protective cover, current shunt Rm = 1Ω,			
BNC for measuring on the back			

TECHNICAL SPECIFICATIONS	IPG 620	IPG 1050	IPG 1272
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/ 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 ³		
Weight	18kg		
Generator section			
Peak value of impulse output voltage, adjustable, ± 5 %	0.3 – 6 kV	0.3 - 10 kV	0.3 - 12 kV
Waveform of impulse output voltage, acc. to VD 0433, IEC 60060	1.2/50 µs ± 30 % / 20 %		
Max. stored energy	20 Joule	50 Joule	72 Joule
Energy storage capacitor C _s	1 µF		
Discharging resistor R _E	76 Ω		
Series resistor R _S	13 Ω		
Load capacitance C _B	0.03 µF		
Resistor in series to the output R _O	25 Ω		
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 Pulses		
Repetition time, selectable	5 - 1000 s	10 - 1000 s	10 - 1000 s
CURRENT SENSE			
Threshold value, selectable	1 - 3000 µAs	1 - 5000 µAs	1 - 5000 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 connector		
Accessories: power cable, turn key, instruction manual			