

HV - IMPULSE GENERATOR

IPG 255

**Impulse voltage
test acc. to IEC 255**

1.2/50 μ s, 0.5J

Rs = 500 W

**0.8 kV, 1 kV, 1.5 kV, 2.5 kV
4 kV, 5 kV, 6 kV and 8 kV**



The High-Voltage Pulse Generator IPG 255 is designed for testing of impulse dielectric strength of components, insulation, air-and surface flash-over gaps of watt-hour meters, static relays etc. according to IEC 255, EN 61036, VDE 0435 part 303.

The impulse test voltage amplitude can be set to different values:

0.8 kV, 1.0 kV, 1.5 kV, 2.5 kV, 4 kV, 5 kV, 6 kV and 8 kV.

In all cases the stored impulse energy is 0,5 J, the series resistor to the output is 500 Ω .

Positive or negative polarity of the test 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 break-down or flash-over of the test object. The threshold of the current monitor is adjustable.

The generator features a microprocessor controlled user interface and display for ease of use. The microprocessor allows the user to either execute 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.. The peak value of the impulse voltage generated and the impulse charge ($\int i dt$) are shown in the display for each pulse and are outputted to the printer.

All generator functions may be computer controlled via the isolated optical interface.

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

As an option the generator can be supplied with an safety test cover, mounted on the top of the generator, see picture above.

Technical specification:
IPG 255
Main frame:

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	4 channels, 5 V - Level
Connectors for external safety interlock loop (not with Opt. 1) and external red and green warning lamps acc. to VDE 0104	24 V = 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

Generator section:

Peak value of impulse output voltage, selectable	0.8 / 1.0 / 1.5 / 2.5 / 4 kV 5 / 6 / 8 kV, +0%/-10%
Waveform of impulse output voltage, acc. to IEC 60	1.2 / 50 μ s \pm 30%/20%
stored energy	0,5 J
Resistor in series to the output R _S	500 Ω
Output polarity, selectable	pos./neg.
Charging time	< 2.0 sec
Trigger : a) manual	push button
b) external Trigger input	10 V / 1 k Ω
c) internal, automatic	test procedure
Number of pulses, selectable	1 - 1000 pulses
Repetition rate, max.	12 Imp./min
Impulse voltage divider, built-in	ratio 1000:1 \pm 2%
CURRENT SENSE, threshold value, selectable	50 - 500 μ As

Option 1: Safety test cover:

on the equipment top, PA 503,
with safety interlock switch connected to the safety interlock loop,
red and green warning lamps installed.

Dimensions: W * H * D, ca.	400 * 150 * 250 mm ³
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