

High-Voltage Impulse Generator

PG 14 - 1960

Lightning surge

10 / 700 μ s
and
0.5 / 700 μ s

Output voltage

0.2 - 14 kV

acc. to CCITT, CNET etc.



The high-voltage impulse generator PG 14-1960 generates standard impulse voltages with waveforms 10/700 μ s. The output waveform can be switched to 0.5/700 μ s wave. Output voltage is adjustable between 0.2 kV and 14 kV. The polarity of the output voltage is selectable. Positive, negative or alternating polarity of the output voltage can be preselected.

It is designed for dielectric testing of components and systems acc. to CCITT-K17/K20/K22, ITU-T/K44, IEC 61000-4-5, EN 61000-4-5, VDE 0847. Two high-voltage outputs with a series resistor of 25 Ω for direct testing of A - B wires are available.

A built-in voltage divider 1000:1 allows monitoring of the impulse output waveform during testing.

PG 14-1960 features a microprocessor controlled user interface and a 5" 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 HILO-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.

TECHNICAL SPECIFICATIONS	PG 14-1960
Mainframe:	
Microprocessor controlled touch panel	5", 800X480, 24 bit
Optical Ethernet Interface for remote control of the generator	optional
Interface for saving reports	USB
External Trigger input	switch
External Trigger output	10 V at 1 k Ω
Connector for external safety interlock loop	24 V =
External red and green warning lamps	230 V, 60W
Mains power	230 V, 50/60 Hz
Dimensions of desk top case W * H * D	555*604*600 mm ³
Weight	96 kg
High-voltage pulse generator	
Impulse output voltage, adjustable	0.2-14.0 kV \pm 5%
Polarity of output voltage/current, selectable	pos/neg/alt
Charging time	< 25 sec
Pulse forming networks:	selectable
a) Impulse voltage 10/700 μ s acc. To CCITT K17/K20	PFN 10/700
Energy storage capacitor	20 μ F / 14.6 kV
Discharging resistor/ Series resistor	50 Ω / 15 Ω
Load capacitor	0.2 μ F
Wave form: front time/tail time	10 / 700 μ s \pm 20%
b) Impulse voltage 0.5/700 μ s acc. to CNET	PFN 0.5/700
Load capacitance	0.007 μ F
Wave form: front time/tail time	0.5 / 700 μ s \pm 30/20%
Direct pulse voltage output on the rear panel	coaxial
current limiting resistors	25 Ω / 25 Ω
for connection of external coupling devices	ratio = 1000 : 1 \pm 5%
Monitor output for pulse output voltage	
Option :	
Software HILO-REMOTE, for remote control	
With Impulse Recording Function (IRF)	
(XP, WIN7, WIN8, WIN10) incl. 5m long light guide and PC Ethernet interface	
Option :	
Description of Remote control commands	
Incl. Ethernet PC-interface and 5m long light-guide	
Option :	
Different test cabinets	