

High-Voltage Impulse Generator

PG 12 - 1440

Lightning surge:**1.2 / 50 μ s****0.5 - 12 kV****Switching surge:****10 / 700 μ s****0.5 - 12 kV****acc. to CCITT, ITU-T, IEC**

The high-voltage impulse generator PG 12-1440 standard impulse voltages with waveforms 1.2/50 μ s or 10/700 μ s. Output voltage is adjustable between 0.5 kV and 12 kV. The polarity of the output voltage is selectable. Positive, negative or alternating polarity of the output voltage can be pre selected.

It is designed for dielectric testing of components and systems acc. to CCITT-K17/K20-K22, ITU-T/K44, IEC 61000-4-5, VDE 0847. The pulse forming network is referred to ground. The high-voltage output is available at a coaxial connector.

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

PG 12-1440 features a microprocessor controlled user interface and display unit for ease of use. The microprocessor allows the user to execute either 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.

External coupling units with 2*25 Ω or 4*25 Ω designed for testing telecom equipment at reduced output voltage are available. They are controlled from the generator via optical-link.

Moreover, all generator functions may be computer controlled via the isolated optical interface. The software program PG 12-1k4 allows full remote control of the test generator and documentation and evaluation of test results.

TECHNICAL SPECIFICATIONS	PG 12-1440
Mainframe:	
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	four channels, 5 V - Level
Connector for external safety interlock loop and external red and green warning lamps acc. to VDE 0104	24 V = 230 V, 60W
Mains power	230 V, 50/60 Hz
Dimensions: 19"-cabinet	555*604*600 mm ³
Weight	65 kg
High-voltage pulse generator	
Impulse output voltage, adjustable	0.2-12.0 kV \pm 5%
Polarity of output voltage/current, selectable	pos/neg/alt
Charging time	< 25 sec
Pulse forming networks:	selectable
a) Impulse voltage 1.2/50 μ s acc. to Energy storage capacitor	PFN 1.2/50 1.0 μ F / 12 kV
Discharging resistor	75 Ω
Series resistor	13 Ω
Load capacitor	0.03 μ F
Wave form: front time/tail time	1.2 / 50 μ s \pm 30%/ \pm 20%
b) Impulse voltage 10/700 μ s acc. to CCITT K17/K20 Energy storage capacitor	PFN 10/700 20 μ F / 14.6 kV
Discharging resistor / Series resistor	50 Ω / 15 Ω
Load capacitance	0.2 μ F
Wave form: front time/tail time	10 / 700 μ s \pm 20%
Direct pulse voltage output on the rear panel for connection of external coupling devices	coaxial ratio = 1000 : 1 \pm 5%
Monitor output for pulse output voltage	
Option :	
PG 12_1k4 software test package, running under MS Windows (XP-WIN7), for the external control of the device includes 5 m long fibre optic cable and PC Interface	
Option :	
Different test cabinets	