The high-voltage impulse generator PG 10-1000 generates standard impulse voltages with waveforms 1.2/50 µs and 10/700 µs. Output voltage is adjustable between 0.5 kV and 10 kV. The polarity of the output voltage is selectable. Positive, negative or alternating polarity of the output voltage can be preselected.

The generator is designed for dielectric testing of components and systems as well as testing of the electromagnetic compatibility of electronic systems and devices acc. to CCITT K17/K20/K22, ITU-T/K44, IEC 61000-4-5, VDE 0847.

The PG 10-1000 features a microprocessor controlled user interface and display unit for ease of use. The microprocessor allows the user to operate the generator manually or to generate, save and execute 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 PG 10-1000 excels by its compact design, simple handling and precise reproducibility of test impulses. A built-in voltage divider 1000:1 allows monitoring of the impulse output waveform during testing.

Moreover, all generator functions may be computer controlled via the isolated optical interface. The software program PG 10_1k allows full remote control of the test generator and documentation and evaluation of test results.
## TECHNICAL SPECIFICATIONS

### 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 an 1 kW
- External Trigger output: 10 V an 1 kW
- Diagnostic input for monitoring of the test device: 4 channels, 5 V - Level
- Connector for external safety interlock loop: 24 V =
- and external red and green warning lamps acc. to VDE 0104: 230 V, 60W
- Mains power: 230 V, 50/60 Hz
- Dimensions: desk top case W * H * D 453*320*520 mm³
- Weight: 35 kg

### HV-unit, pulse forming networks:
- Charging voltage, adjustable (10-turn pot): 0.2 - 10 kV ± 5%
- Polarity of the output pulse voltage selectable: pos/neg/alt
- Charging time: < 20 sec
- Impulse voltage outputs of the rear panel: coaxial
- current limiting resistors: 0 Ω / 25 Ω / 25 Ω
- Impulse voltage divider integrated: ratio = 1000: 1± 2 %

### Pulse forming networks, built-in
- a) Impulse voltage 1.2/50μs acc. to
  - Energy storage capacitor: 1.0 μF / 10 kV
  - Max. stored energy: 50 J
  - Discharging resistor: 75 Ω
  - Series resistor: 13 Ω
  - Load capacitor: 0.03 μF
  - Wave form: front time/tail time: 1.2 / 50 μs, ±30 % /± 20 %
- b) Impulse voltage 10/700μs acc. to CCITT / ITU-T K17/K20, IEC 1000-4-5
  - Energy storage capacitor: 20 μF / 10 kV
  - Max. stored energy: 1000 J
  - Discharging resistor: 50 Ω
  - Series resistor: 15 Ω
  - Load capacitance: 0.2 μF
  - Wave form: front time/tail time: 10/700 μs ± 20 %

### Option:
- PG 10_1k software test package, running under Microsoft Windows (XP-WIN7), for the external control of the device includes 5 m long fibre optic cable and PC Interface.

### Option:
- Pulse forming network acc. to EN 60065
  - Type: PG 10-1ke, Cs = 1 nF, Rs = 1kΩ

### Additional accessories available:
- Coupling network 4 * 100 Ω
- Test cabinet KN 100-4

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