

# High current pulse generator

## PG 10-7k

### Current Wave Form

10 / 350  $\mu$ s

### Voltage increase

1.2  $\mu$ s

**For shock current testing of  
lightning protection  
components**



The shock current generator type PG10-7k generates lightning shock currents with the curve shape 10/350  $\mu$ s according to IEC, VDE etc.

The peak value of the shock current can be continuously adjusted by varying the charging voltage up to the maximum value. The generators are used for shock testing of electrical components, surge arresters and electronic circuits.

The pulse current output is located on the top and has high current sockets for recording a pluggable test adapter. The pulse-forming network contains a broadband current measurement resistance for monitoring the pulse current.

With the help of the microprocessor-controlled operating and display unit, the user can define test sequences, save and execute in the device. The test parameters: charging voltage, polarity, number of pulses and repetition rate are set via a digital rotary encoder and shown in the display.

The test parameters can be logged to a printer during the test.

Sales Partner:



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<b>Technical data:</b>	<b>PG10-7k</b>
<b>Basic device, Control</b>	
Microprocessor control, display with LCD module	8*40 characters
Optically insulated interface for remote control of the generator	Built-in
Parallel printer interface for online logging	D 25 pol
External trigger input	10 V to 1 k
External trigger output	10 V to 1 k
Connections for external safety circuit	24 V =
as well as external red and green warning lamps according to VDE 0104	230 V, 60W
Power supply	230 V, 50/60 Hz
Structure: 19" - small cabinet, on driving base. B * H * T	approx. 553*800*1250 mm <sup>3</sup>
Weight	240 kg
<b>High-voltage charger</b>	
Charging voltage adjustable	0.2 - 10 kV x 2%
Charging capacitor	140uF
max. energy content	7000 Ws
Charging time, max.	< 60 sec
max. repetition rate	1/80 sec
<b>Pulse-forming network</b>	
Curve shape of short-circuit current, according to IEC 60060 - 2	<b>10 / 350 <math>\mu</math>s .20%</b>
Current value, adjustable via charging voltage	<b>50 - 2500 A x 10 %</b>
Voltage increase idle	<b>1.2<math>\mu</math>s -30%</b>
Polarity of the pulse output size, switchable	POS/NEG/ALT
High current output, sockets device rear	12 mm
Ground connection to ground the device	12 mm screw b.
Pulse current measurement resistance, built-in	2 m $\Omega$ , 1.0 MHz
<b>Option: Remote control</b>	
Remote control PC software incl. 5 m long fiber optic cable and USB-PC interface.	
<b>Option: Test chamber</b>	
Test chamber in 19" cabinet, with safety glass door and safety switch, protects against the HV output terminals. When the test chamber door is opened, the generator is switched off, or the mains voltage fails, then the ground switch closes and discharges the test object and the internal storage capacitor.	Test room approx. W*H*D 470*530*490 mm <sup>3</sup>
<b>Option: Synchronization</b>	
Current pulse trigger synchronization 0-360° to the zero passage of the sine ALTERNating voltage, phase angle in increments of 1° adjustable supply voltage (E.U.T.power supply) 400Veff / 50Hz Without decoupling from the HV - AC power supply.	
<b>Option: Pearson Coil</b>	
Galvanically isolated measurement of the current pulse with a Pierson coil.	
<b>Option: Security door</b>	
Polycarbonate safety door with solid stainless steel clasps.	