

# STANDARD PROGRAMMABLE RESISTOR

## SRP-50k0-10G0 / SRP-50k0-100G0



The **SRP-50k0-10G0** and the **SRP-50k0-100G0** calibrators are a source of high resistance, used as a standard in calibration and tests of analogue and digital insulation resistance meters.

The setted resistance by the calibrator can be maintained for a long time under external direct voltage up to 2500V, provided that the current in the measuring circuit does not exceed 1,5mA.

The required resistance is set by the user using the calibrator's touch keypad or via an external PC application. The required value is set automatically thanks to the switching of a precise resistance matrix. The controlling processor calculates the required combination of resistors, ensuring adequate resistance precision.

### Standard accessories:

- the SRP software,
- 1,8 m test lead with 5kV banana plugs, blue,
- 1,8 m test lead with 5kV banana plugs, red,
- 2,2 m shielded cable with banana plugs, black,
- operating manual,
- power cord,
- calibration certificate.

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# SRP-50k0-10G0 SRP-50k0-100G0

## Technical specification:

Resistance range	Resolution	Accuracy	
		SRP-50k0-10G0	SRP-50k0-100G0
50...20000 kΩ	50 kΩ	0,1% s.v.	0,05% s.v.
20050...100000 kΩ	50 kΩ	0,2% s.v.	0,1% s.v.
100,1...200,0 MΩ	0,1 MΩ	0,2% s.v.	0,1% s.v.
200,1...1000,0 MΩ	0,1 MΩ	0,5% s.v.	0,2% s.v.
1,001...2,000 GΩ	0,001 GΩ	0,5% s.v.	0,2% s.v.
2,001...10,000 GΩ	0,001 GΩ	1,0% s.v.	0,5% s.v.
10,001...100,000 GΩ*	0,001 GΩ	-	0,5% s.v.

\*- only SRP-50k0-100G0

s.v.- „selected value”

## Additional technical specification:

- supply voltage U	100...240V AC (50/60Hz)
- maximum power consumption	75VA
- operating temperature range	+10...30 °C
- maximum current in the measuring circuit	1,5mA
- maximum operating voltage	2500V DC
- long-term stability of resistors	<1%
- maximum operating altitude	2000m
- dimensions	540 x 450 x 200mm
- weight	approx 16kg

The calibrators should be used at ambient temperature from 10 to 30°C, relative humidity from 25 to 60% and atmospheric pressure from 630 to 800 mm Hg.

## Storage temperature range in the original packaging:

- 20...+60°C
- 80 % maximum relative humidity for the temperatures up to 31°C and with linear decrease of the relative humidity up to 50% for the temperature increase to 40°C

## Storage temperature range without packaging:

- +10...+30°C maximum relative humidity up to 80% at 35°C

The SRP software is used to connect the calibrators with a PC.

The software is easy to use and is a useful tool in the process of testing the devices by means of the calibrator. The calibrator should be connected to a computer via the USB port.

## Software functions:

- remote control of the calibrator,
- create and save the automatic programs to check the tested devices,
- set the keypad lock and time to sleep mode,
- change the display brightness and keypad tones,
- software language selection,
- calibrator software update from the PC via the USB interface.

