STANDARD PROGRAMMABLE RESISTOR
SRP-50k0-5T0

The **SRP-50k0-5T0** calibrator is 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 5000V, provided that the current in the measuring circuit does not exceed 3mA.

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 of the SRP-50k0-5T0:

- calibrator SRP-50k0-5T0
- CD with 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

SRP-50k0-5T0

Technical specification:

Resistance range	Resolution	Accuracy
0,05…999,95 MΩ	0,05 MΩ	
0,001…999,999 GΩ	0,001 GΩ	1,5%
0,0001…5,0000 TΩ	0,0001 TΩ	

• 5TΩ = 5 000GΩ = 5 000 000MΩ = 5 000 000 000kΩ = 5 000 000 000 000Ω

Additional technical specification:

- supply voltage U   100…240V AC (50/60Hz)
- maximum power consumption   75VA
- operating temperature range   +10...30 ºC
- maximum current in the measuring circuit   3mA
- maximum operating voltage   5000V DC
- long-term stability of resistors   <1%
- maximum operating altitude   2000m
- dimensions   540 x 450 x 200mm
- weight   15kg

The calibrator 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…+60ºC
• 80 % maximum relative humidity for the temperatures up to 31ºC and with linear decrase of the relative humidity up to 50% for the temperature increase to 40ºC
Storage temperature range without packaging:
• +10…+30ºC maximum relative humidity up to 80% at 35ºC

Software

The SRP software is used to connect the SRP-50k0-5T0 calibrator 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.