SRP-50k0-5T0 / SRP-50k0-10G0 / SRP-50k0-100G0

Features

Standard programmable resistors are a source of high resistances used as standard equipment for calibration and testing of analog and digital insulation resistance meters.

The resistance obtained thanks to these resistors can be kept for a long time under external direct voltage up to **5000 V** (**SRP-50k0-5T0**), **2500 V** (**SRP-50k0-10G0** and **SRP-50k0-100G0**), under the condition that current in the measurement circuit does not exceed the value of 1.5 mA (3 mA for SRP-50k0-5T0) or **10 kV** (**SRP-10G0-10T0**).

The required resistance is set by the user by means of the standard resistor's keypad and - for SRP-50k0-5T0 / SRP-50k0-10G0 / SRP-50k0-100G0 - external PC application **SRP Control Software**. Setting of the required value is automatic thanks to commutation of a precision resistance matrix. The control processor calculates the required combination of resistors providing the proper precision of the resultant resistance.
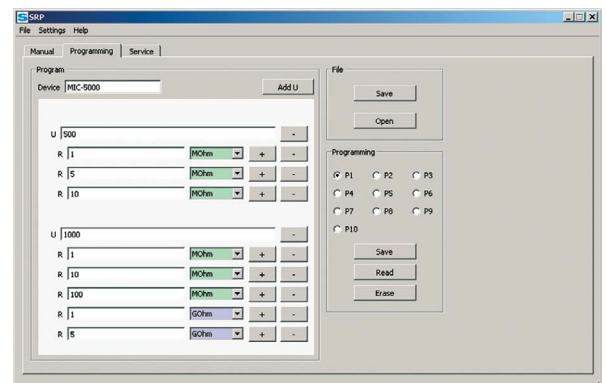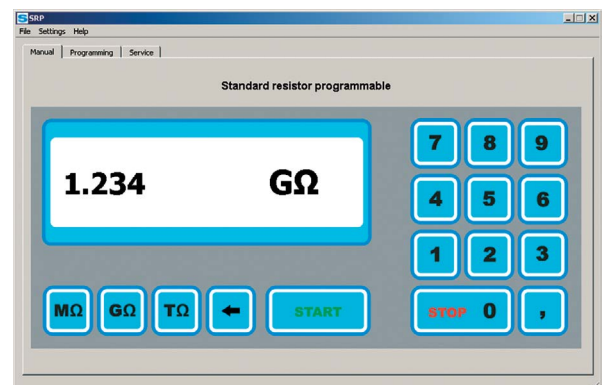
SRP calibration software

The **SRP Control Software** application serves for inter-operation between SRP-50k0-5T0, SRP-50k0-10G0 and SRP-50k0-100G0 resistance calibrators and a computer. The calibrator connects to a computer via USB port.

The application is easy to use and a useful tool in the process of testing devices by means of a calibrator.

Capabilities of the application:

• remote calibrator control,
• creation and saving of automatic programs for testing of equipment,
• resistor settings include a keyboard lock and time until switching to sleep mode,
• change of display brightness and keyboard response sounds,
• language selection in application,
• firmware update from computer via USB interface.
• software upgrade from a computer via a USB interface.

Technical specifications

Resistor	Display range	Resolution	Accuracy
SRP-10G0-10T0	10 GΩ...10,0 TΩ	from 10 GΩ	from 1% s.v.
SRP-50k0-5T0	50 kΩ...5.0000 TΩ	from 0,05 MΩ	1.5% s.v.
SRP-50k0-100G0	50 kΩ...100.00 GΩ	from 50 kΩ	from 0.05% s.v.
SRP-50k0-10G0	50 kΩ...10.00 GΩ	from 50 kΩ	from 0.1% s.v.

Other technical specifications

Supply voltage	100...240 V AC (50/60 Hz)
Maximum power consumption	75 VA
Operating temperature range	10...30°C
Maximum current in measuring circuit	3 mA
Maximum operating voltage	
SRP-10G0-10T0	10 000 V DC
SRP-50k0-5T0	5000 V DC
SRP-50k0-100G0	2500 V DC
SRP-50k0-10G0	2500 V DC
Long-term resistor stability	<1%
Dimensions	540 x 450 x 200 mm
Weight	ca. 15 kg

> **Standard programmable resistors are intended for operation at ambient temperatures within the range from 10 to 30°C, relative humidity of air from 25 to 60%, and atmospheric pressure from 630 to 800 mm Hg.**

Standard accessories

Test lead 1.8 m blue 5 kV (banana plugs)

WAPRZ1X8BUBB

Test lead 1.8 m red 5 kV (banana plugs)

WAPRZ1X8REBB

Test lead 1.8 m black 5 kV (banana plugs, shielded)

WAPRZ1X8BLBB

Mains cable 230 V (IEC C13 plug)

WAPRZ1X8BLIEC

USB cable
only for
• SRP-50k0-5T0
• SRP-50k0-10G0
• SRP-50k0-100G0

WAPRZUSB

SRP Control Software
only for
• SRP-50k0-5T0
• SRP-50k0-10G0
• SRP-50k0-100G0

User manual

s.v.- set value