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THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

WARNING

OBSERVE ALL SAFETY RULES WHEN WORKING WITH HIGH VOLTAGES OR LINE VOLTAGES. WHENEVER HAZARDOUS VOLTAGES (>45V) ARE USED, TAKE ALL MEASURES TO AVOID ACCIDENTAL CONTACT WITH ANY LIVE COMPONENTS:

- USE MAXIMUM INSULATION AND MINIMIZE THE USE OF BARE CONDUCTORS.
- REMOVE POWER WHEN HANDLING THE UNIT.
- POST WARNING SIGNS AND KEEP PERSONNEL SAFELY AWAY.

CAUTION

DO NOT APPLY ANY VOLTAGES OR CURRENTS TO THE TERMINALS OF THIS INSTRUMENT IN EXCESS OF THE MAXIMUM LIMITS INDICATED ON THE FRONT PANEL OR THE OPERATING GUIDE LABEL.



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SRX1 SERIES RESISTANCE STANDARD OPERATION MANUAL



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General Information

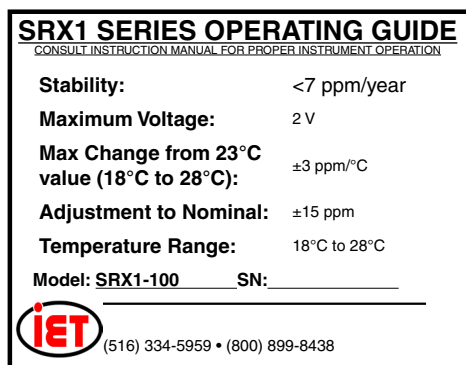
The SRX1 Series are extremely stable, precise, laboratory or portable resistance standards.

The SRX1 Series is ideal for any applications inside or outside of a laboratory environment within the temperature range of 18°C to 28°C. They are rugged and small, and they have a

virtually zero temperature coefficient. Each unit has a temperature chart showing its accuracy range in 0.5°C increments. The unit requires no oil or air bath because of the low temperature coefficient.



SRX1 Series Resistance Standard



Sample Label

Replaceable Parts List

IET Part Number	Description
30-21	Red Bindnig Post
30-20	Black Binding Post
32-19	Gold Binding Post
SRX1-1-Res	SRX1 1 Ω Resistor Assembly
SRX1-10-Res	SRX1 10 Ω Resistor Assembly
SRX1-100-Res	SRX1 100 Ω Resistor Assembly
SRX1-1k-Res	SRX1 1 kΩ Resistor Assembly
SRX1-10k-Res	SRX1 10 kΩ Resistor Assembly
SRX1-100k-Res	SRX1 100 kΩ Resistor Assembly
SRX1-1M-Res	SRX1 1 MΩ Resistor Assembly

Specifications

For convenience to the user, the pertinent specifications are given in an **OPERATING GUIDE**, shown in the figure, affixed to the case of the instrument.

SPECIFICATIONS

Model SRX1-	Nominal Value (Ω)	Adjustment to Nominal (ppm)	Stability 1 year (ppm)	Max Voltage (V)
1	1	<20	<10	<0.32
10	10	<20	<10	<1
100	100	<15	<7	<2
1k	1 k	<10	<7	<10
10k	10 k	<15	<5	<30
100k	100 k	<15	<7	<100
1M	1 M	<22	<10	<100

Test Conditions: Four-terminal Kelvin measurements, low power, at 23°C; two-terminal for 1 MΩ. **Initial calibration data, traceable to SI, is provided.**

Terminals:

The binding posts are tellurium copper for low thermal emf and low resistance. A case ground terminal is also provided.

100 kΩ and under: Four 5-way binding posts for 4-terminal measurement.

1 MΩ and over: Two 5-way binding posts for 2-terminal measurement.

Operating Conditions: 18-28°C; <80% RH.

Maximum Applied Power: As indicated in table for Max. Voltage above.

Negligible change in resistance value will result from applying voltages up to the maximum voltage as indicated in the table above.

Application of up to 5 W is allowed; change in resistance value from the max voltage up to a total of 5 W will be <300 ppm.

Change Resulting from Power Cycling: Value of the standard will remain within specifications after unlimited applications of power cycles of up to 5 W.

Resistance Change with Temperature: Outside the range of +18°C to +28°C, the Standard Resistors shall not change more than 3 ppm from their reported calibration value.

Change Resulting from Temperature Cycling: The standard resitors shall have a temperature cycling change of 2 ppm or less for a cycle from 23° to 0°C to 23°C and for a temperature cycle from 23°C to 40°C to 23°C.

Non-Operating Storage Conditions: 18-28°C; RH not controlled.

Dimensions: 8.6 cm H x 10.2 cm W x 12.7 cm D (3.4" x 4.0" x 5").

Weight: 1 lb, nominal.