

# Standard Resistance Reference or Working Standards

## SRX • SRA • SRC • Series

Economical high performance resistance standards.

- Very stable - up to 10 ppm/yr
- Excellent TC - as low as 1 ppm/°C
- Rugged
- Wide range of values - 1 mΩ to 10 TΩ
- Optional values available
- Optional transit case
- SRX series available at 5000 V

### SRX/SRA SERIES

Designed for use as a reference or working standard in industrial, research, and educational laboratories.

### SRC SERIES

Economical high resistance, high voltage standards for applications requiring values up to 10 TΩ

SRX Maximum Voltage: 5000 V.



SRA Series Resistance Standard

## SPECIFICATIONS

Model	Nominal Value (Ω)	Adjustment to Nominal (ppm)		Calibration Uncertainty (ppm)	Stability 1 year (ppm)		Tempco (ppm/°C)		Power Coef. (ppm/mW)		Max. Power (W)		Max. Voltage (V)		Max. Current	
		SRX	SRA		SRX	SRA	SRX	SRA	SRX	SRA	SRX	SRA	SRX	SRA	SRX	SRA
0.001	0.001	200	500	200	50	100	20	20	0.1	0.1	0.2	0.2	0.015	0.015	14 A	14 A
0.0019	0.0019	200	500	200	50	100	20	20	0.1	0.1	0.38	0.38	0.03	0.03	14 A	14 A
0.002	0.002	200	500	200	50	100	20	20	0.1	0.1	0.2	0.2	0.02	0.02	10 A	10 A
0.01	0.01	200	500	100	50	100	20	20	0.1	0.1	2	2	0.15	0.15	14 A	14 A
0.019	0.019	200	500	100	50	100	20	20	0.1	0.1	3.8	3.8	0.3	0.3	14 A	14 A
0.1	0.1	200	500	20	50	100	20	20	0.1	0.1	1	1	0.3	0.3	3 A	3 A
0.19	0.19	200	500	20	50	100	20	20	0.1	0.1	1.7	1.7	0.6	0.6	3 A	3 A
1	1	20	100	10	20	50	10	20	0.5	1	0.25	1	0.5	1	0.5 A	1 A
1.9	1.9	20	100	10	20	50	10	20	0.5	1	0.25	1	0.7	1.4	0.36 A	0.73 A
10	10	10	30	5	10	18	3	5	0.15	0.25	0.1	1	1	3	0.1 A	0.3 A
19	19	10	30	5	10	18	3	5	0.15	0.25	0.1	1	1.4	4.4	70 mA	23 mA
50	50	10	20	5	10	15	1	3	0.05	0.15	0.1	1	2.3	7	45 mA	140 mA
100	100	10	20	5	10	15	1	3	0.05	0.15	0.1	1	3	10	30 mA	0.1 A
190	190	10	20	5	10	15	1	3	0.05	0.15	0.1	1	4.4	14	23 mA	70 mA
1K	1 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	10	30	10 mA	30 mA
1.9K	1.9 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	14	42	7 mA	22 mA
10K	10 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	30	100	3 mA	10 mA
19K	19 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	43	140	2.2 mA	7 mA
100K	100 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	100	300	1 mA	3 mA
190K	190 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	140	440	0.7 mA	2.2 mA
1M	1 M	20	50	5	15	20	3	10	0.15	0.5	0.1	1	316	1000	0.3 mA	1 mA
1.9M	1.9 M	20	50	5	15	20	3	10	0.15	0.5	0.1	0.5	440	1000	0.23 mA	0.5 mA
10M	10 M	20	50	10	20	50	5	10	0.25	0.5	0.1	0.1	2000	2000	0.1 mA	0.1 mA
19M	19 M	20	50	10	20	50	5	15	0.7	0.7	0.05	0.05	5000	5000	50 μA	50 μA
100M	100 M	50	100	15	20	100	5	25	1.2	1.2	0.01	0.01	5000	5000	10 μA	10 μA

SRC-190M	190 M	0.1%	30	500	25
SRC-1G	1 G	0.5%	100	500	50
SRC-1.9G	1.9 G	0.5%	100	500	50
SRC-10G	10 G	0.5%	200	500	50
SRC-19G	19 G	0.5%	500	500	50
SRC-100G	100 G	0.5%	900	500	50
SRC-190G	190 G	1%	900	500	50
SRC-1T	1 T	2%	2500	500	100
SRC-1.9T	1.9 T	2%	2500	1000	200

### GENERAL

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

Terminals: SRX: Four 5-way binding posts for 4-terminal measurement for 190 kΩ and under; two binding posts for 1 MΩ and over. The binding posts are constructed of tellurium copper for low thermal emf and low resistance. A case ground terminal is also provided. Triax and bnc terminals are also available.

SRC: Additional GUARD terminal is provided.

Dimensions: 8.6 cm H x 10.5 cm W x 12.7 cm D (3.4" x 4.15" x 5").

Transit Case: Optional Model SRC-100 lightweight transit case with handle, suitable for transporting and storing two units. The case provides mechanical protection and insulation from temperature changes during transportation or shipping.

Operating Temperature Range: 15 to 30°C.

SRX Series Maximum Voltage: 5000 V.

Combination units in single housing available.



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