

# High Resistance Standards

## VRS-100 • Series p. 1 of 2

An economical set of precision high resistance standards designed for testing megohmmeters

or other instruments; 9 or 10 values up to 10 TΩ with special Kel-F isolation.

- Set of nine resistors - 1 kΩ, 10 kΩ, 100 kΩ, 1 MΩ, 10 MΩ, 100 MΩ, 1 GΩ, 10 GΩ, 100 GΩ, (1 TΩ and 10 TΩ optional), open circuit
- Nonstandard value sets up to 10 TΩ
- High-accuracy - up to 20 ppm
- Maximum voltage: up to 5000 V (higher voltages are available)

- Excellent TC - up to 5 ppm/°C
- Excellent stability - up to 10 ppm/year
- Both Ground and Guard terminals are brought out to minimize leakage effects
- Two styles available

### STYLES

#### Rotary Switch Style



Model VRS-100 High Resistance Standards, rotary switch style, with guard and case ground

#### Binding Post Style



Model VRS-100 High Resistance Standards, binding post version

Three 5-way, tellurium-copper, binding posts for **H**, **L**, and **GUARD** mounted on a Kel-F base, along with an additional binding post for case **GND**

Series of 5-way tellurium-copper binding posts for 2-terminal measurement, mounted on Kel-F base (for 1 MΩ values and over) along with two additional binding posts for case **GND**

#### Dimensions:

16.7 cm W x 16.7 cm H x 22.9 cm D  
(6.6" x 6.6"x9")

#### Weight:

2 kg (4.5 lb)

#### Dimensions:

31.2 cm W x 11.4 cm H x 12.7 cm D  
(12.3" x 4.5"x5")

#### Weight:

2 kg (4.5 lb)

### SPECIFICATIONS

Nominal value	Max Voltage (V)	Adjustment Accuracy	TC (ppm/°C)	VC (ppm/V)	Accuracy for full voltage	Stability ppm/year
1 kΩ	50	20 ppm	3	-	20 ppm	10
10 kΩ	150	20 ppm	3	-	20 ppm	10
100 kΩ	500	20 ppm	3	-	20 ppm	10
1 MΩ	1,250	20 ppm	5	-	20 ppm	15
10 MΩ	5,000	50 ppm	25	0.2	120 ppm	20
100 MΩ	5,000	100 ppm	25	1.2	0.8%	100
1 GΩ	5,000	0.5%	25	1.2	0.8%	500
10 GΩ	5,000	0.5%	50	2	1%	500
100 GΩ	5,000	1%	50	5	3%	500
1 TΩ	5,000	2%*	100	5	5%	500
10 TΩ	5,000	5%*	300	5	10%	--

\* 1 TΩ and 10 TΩ calibrated at 1000 V

#### Operating Temperature Range:

18°C to 28°C



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### ORDERING INFORMATION

Model Number	Style	Resistance Values	Value Range
VRS-100-9-1k-ROT	Rotary Switch	9 values	1 kΩ to 100 GΩ
VRS-100-10-1k-ROT	Rotary Switch	10 values	1 kΩ to 1 TΩ
VRS-100-9-1k-BP	Binding Post	9 values	1 kΩ to 100 GΩ
VRS-100-10-1k-BP	Binding Post	10 values	1 kΩ to 1 TΩ
VRS-100-11-1k-BP	Binding Post	11 values	1 kΩ to 10 TΩ
VRS-100-X-X-X	Custom Select	Custom Select	Custom Select
Options:	10 TΩ value may be included in any model 10 kV option available for resistances ≥10 MΩ		

