VRS-100 Series Page 1 of 2

An economical set of precision high resistance standards designed for testing megohmmeters or other instruments; 9 or 10 values up to $10 \text{ T}\Omega$ with special Kel-F isolation.

Features:

- Set of nine resistors 1 k Ω , 10 k Ω , 100 k Ω , 1 M Ω , 10 M Ω , 100 M Ω , 1 G Ω , 10 G Ω , 100 G Ω , (1 T Ω and 10 T Ω optional), open circuit
- Nonstandard value sets up to 10 TΩ
- High-accuracy up to 20 ppm
- Maximum voltage: 5,000 V or 10,000 V
- 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

Rotary Switch Style

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**

Dimensions:

16.7 cm W x 16.7 cm H x 22.9 cm D (6.6" x 6.6" x 9")

Weight:

2 kg (4.5 lb)



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

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

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	Adjustment to accuracy	Temperature coefficient	Voltage coefficient (±ppm/V)	Stability
1 k Ω	50 V	20 ppm	3 ppm/°C		10 ppm/year
10 k Ω	150 V	20 ppm	3 ppm/°C	-	10 ppm/year
100 k Ω	500 V	20 ppm	3 ppm/°C	-	10 ppm/year
1 Μ Ω	1,250 V	20 ppm	5 ppm/°C	<1	15 ppm/year
10 M Ω	5,000 V	50 ppm	25 ppm/°C	<1	20 ppm/year
100 M Ω	5,000 V or 10,000 V	100 ppm	25 ppm/°C	1	100 ppm/year
1 G Ω	5,000 V or 10,000 V	0.50%	25 ppm/°C	1	500 ppm/year
10 G Ω	5,000 V or 10,000 V	0.50%	50 ppm/°C	2	500 ppm/year
100 G Ω	5,000 V or 10,000 V	1%	50 ppm/°C	5	500 ppm/year
1 T Ω	5,000 V or 10,000 V	2%*	100 ppm/°C	<20 (10 ppm typical)	500 ppm/year
10 Τ Ω	5,000 V or 10,000 V	5%*	300 ppm/°C	<20 (10 ppm typical)	

^{* 1} $T\Omega$ and 10 $T\Omega$ calibrated at 1000 V

Operating Temperature Range:

18°C to 28°C

VRS-100 Series

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ORDERING INFORMATION

Model Number	Style	Resistance Values	Value Range
VRS-100-9-1k-ROT	Rotary Switch	9 values	1 k Ω to 100 G Ω
VRS-100-10-1k-ROT	Rotary Switch	10 values	1 k Ω to 1 T Ω
VRS-100-9-1k-BP	Binding Post	9 values	1 k Ω to 100 G Ω
VRS-100-10-1k-BP	Binding Post	10 values	1 k Ω to 1 T Ω
VRS-100-11-1k-BP	Binding Post	11 values	1 k Ω to 10 T Ω
VRS-100-X-X-X	Custom Select	Custom Select	Custom Select

Options:

-10TΩ: 10 TΩ value may be included in any model -10KV: 10 kV option available for resistances ≥100 MΩ

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