MODEL 100 RESISTANCE STANDARDS

- *EXCELLENT STABILITY*
- *HIGH IMMUNITY FROM ENVIRONMENTAL EFFECTS*
- *FOR USE IN AIR AT 23 °C*
- *LOW TEMPERATURE COEFFICIENTS*
- *AVAILABLE FROM 1 Ω TO 10 MΩ*

Ohm-Labs' 100-series resistance standards are designed for laboratory or on-site calibration. The low coefficients of temperature allow them to be used on a bench or in the field without loss of accuracy. They are immune from changes in barometric pressure and relative humidity, and are not affected by moderate vibration or shock. They display low reactance, allowing their use as both DC or AC standards.

All models are housed in a rugged, die-cast aluminum case. Internal shock-absorbing construction reduces the possibility of shifts in value due to vibration or impact. Connections are made via gold plated tellurium copper low thermal emf binding posts, which accept bare wire, spade lugs or banana plugs.

All models are supplied with ISO17025 accredited, traceable calibration, including temperature characterization.

Decade and thermometry values are standard. Other resistance values are available on request.

High resistance standards in this line are available in a guarded construction. Below one ohm, please see our low resistance standards. For a full set of standards, see our new constant temperature Multiple Resistance Standard, model MRS.

100-Series Specifications

Model	Ohms	Dev (ppm)	Stability 12 mo	TCR 18-30 C	Max V
100	1	<3	<3	<0.2	0.5
101	10	<3	<3	<0.2	1
101-T	25	<3	<3	<0.2	1
102	100	<3	<3	<0.2	3
142	400	<3	<3	<0.2	10
103	1 K	<3	<3	<0.2	10
104	10 K	<3	<3	<0.2	30
105	100 K	<5	<5	<0.3	100
106	1 M	<10	<10	<0.5	100
107	10 M	<20	<10	<1.0	300

Stated accuracy is at time of manufacture.
18-30 °C change is in ppm (μΩ / Ω)
Power: 10 mW recommended
Hysteresis: 15-30 °C <0.1 ppm; 0-40 °C <2 ppm
Calibration uncertainty (at 23 °C) 1-110 Ω = 1.0 ppm,
110 Ω -100 K = 1.5 ppm, 1 M = 5 ppm, 10 M = 15
All resistance standards carry a five year warrantee

For special values, use the below examples:

11.90	1.9 Ohms	Stability and coefficients are similar to above models.
13.52	350 Ohms	
143	4000 Ohms	
13.36	3.333 Meg	

Accessories:
Installed temperature sensor
Transit container

Calibration A2LA ACCREDITED Cert # 2481.01

ISO17025 accredited calibration included.

-LABS Excellence in Resistance

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