

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 standards are designed for laboratory or on-site calibration use. Their low coefficients of temperature allow them to be used in a variety of environments 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 five-way binding posts which accept bare wire, spade lugs or banana jacks.

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

All models are available with an optional temperature sensor bonded to the resistance element. 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 1000 series low resistance standards.



ISO17025 accredited calibration included.

100-Series Specifications

Model	Ohms	Dev (ppm)	Stability 12 mo	18-30 °C	Max V
100	1	10	5	3	1
101	10	10	5	2	1
12.51	25	15	5	2	1
102	100	10	5	2	3
142	400	10	5	2	10
103	1 K	10	5	2	10
104	10 K	5	5	1	30
105	100 K	10	5	2	100
106	1 M	15	10	2	100
107	10 M	20	10	3	300

Stated accuracy is at time of manufacture.

18-30 °C change is in ppm ($\mu\Omega / \Omega$)

Power: <100 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.
12.51	25 Ohms	
143	4000 Ohms	
13.36	3.333 Meg	

Accessories:

Installed temperature sensor

Transit container

