

## 200-SERIES RESISTANCE STANDARDS

- REFERENCE RESISTANCE STANDARDS
- LOW TEMPERATURE COEFFICIENTS
- STABLE OVER TIME
- HIGH IMMUNITY FROM ENVIRONMENTAL EFFECTS
- MAY BE USED IN OIL OR AIR

Ohm-Labs' 200-Series Reference Resistance Standards are designed for maintaining the ohm at levels from 0.1 ohm to 10 megohms.

Each standard is individually wound from selected Evanohm alloy wire, which has been carefully heat treated for near zero temperature coefficients of resistance. They are optimized for use at either 20, 23 or 25 °C.

After a period of initial settling, the long term drift is projected to remain below 1  $\mu\Omega/\Omega$  per year.

Oil-filled and hermetically sealed, these standards are highly immune from changes in barometric pressure and relative humidity.

100 K $\Omega$  and above include BPO connectors and internal guarding, for use as 4-wire, 2-wire or guarded standards. These models include an internal 10 K thermistor temperature sensor.



MODEL 200 1  $\Omega$  AND 206 1 M  $\Omega$

Their rugged design allows commercial transport without shifts in value; this has been verified by repeated ground shipping.

All models include ISO17025 accredited calibration, with temperature coefficient data.

In addition to decade values, the 200-Series are offered in -T values for thermometry, and -Q values for use with a Quantum Hall System.

Special values with equivalent specifications are available upon request.

All Ohm-Labs resistance standards carry a five year warranty.

Model Number	Nominal Resistance	Tolerance in ppm	Rated Current	Typical Coefficients	Initial 12 mo. Stability *
2001	0.1	<5	3 A	Temperature: $\alpha < 0.1 \text{ ppm} / ^\circ\text{C}$ $\beta < 0.1 \text{ ppm} / ^\circ\text{C}$  Voltage $< 0.1 \text{ ppm} / \text{V}$  Pressure $< 0.1 \text{ ppm} / \text{kPa}$	< 2 ppm
2000	1	<5	1 A		< 2
200	1	<3	100 mA		< 2
201	10	<5	30 mA		< 2
201-T	25	<5	25		< 2
202	100	<3	10		< 2
203	1 K	<5	3		< 2
203-Q	6.4 K	< 10	1.25		< 3
204	10 K	<3	1		< 2
204-Q	12.9 K	< 10	1		< 3
205	100 K	<5	0.3		< 3
206	1 Meg	<5	0.1		< 3
207	10 Meg	<10	0.03		< 5

**Notes:**

- \* Long term stability is <1 ppm / year
- Tolerance is accuracy at time of manufacture
- Temperature coefficients are at 20, 23 or 25 °C.

**Physical:**

13 cm dia. x 17 cm high (5 x 6.5 in); 4 kg (8 lbs)



ISO17025 accredited calibration included.

