

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 low temperature coefficients of resistance. They are optimized for use at either 20, 23 or 25 °C.

After initial settling, the long term drift is projected to remain below 1 $\mu\Omega/\Omega$ per year. Targeted long term drift is <0.1 $\mu\Omega/\Omega$ per year, but each standard varies slightly.

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

100 K Ω and above also feature BPO connectors and full internal guarding, for use as 4-wire, 2-wire or guarded standards. Also included is an internal 10 K thermistor temperature sensor.



MODEL 200 1 Ω AND 206 1 M Ω

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

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 are available upon request.

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

Tolerance is accuracy at time of manufacture

Temperature coefficients are at 20, 23 or 25 °C +/-5 °C.

Physical:

127 mm dia. x 165 mm high (5" x 6.5"); 4.5 kg (10 #)

