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 1 ohm to 10 megohms.

Each standard is individually wound from selected nickel-chromium alloy wire, which is carefully heat treated for near zero temperature coefficients of resistance. They are optimized for use at customer specified 20, 23 or 25 °C. All models include an internal 10 K thermistor temperature sensor.

After initial settling, the long term drift is typically less than 0.2 μΩ/Ω per year for most models.

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

100 KΩ and above include BPO connectors and internal guarding, for use as 4-wire, 2-wire or guarded standards.

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.

All models include ISO 17025 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	12 Month Stability *
200	1	<2	100 mA	Temperature: α < 0.1 ppm / °C β < 0.01 ppm / °C Voltage < 0.1 ppm / V Pressure < 0.001 ppm / kPa	<0.1 ppm
201	10	<2	30 mA		< 0.2
201-T	25	<2	25		< 0.2
202	100	<2	10		< 0.2
203	1 K	<3	3		< 0.3
203-Q	6.4 K	<5	1.25		< 0.3
204	10 K	<2	1		< 0.2
204-Q	12.9 K	< 10	1		< 0.3
205	100 K	<5	0.3		< 0.3
206	1 Meg	<5	0.1		< 0.5
207	10 Meg	<10	0.03		< 1

Notes:
* Long term. For first year, allow 2x this amount
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)

Excellence in Resistance

A2LA ACCREDITED CERTIFICATE #2481.01

ISO 17025 accredited calibration included.

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