

## GUARDED HIGH RESISTANCE STANDARDS

- RESISTANCE FROM 1 MΩ TO 10 TΩ
- LOW TEMPERATURE COEFFICIENT
- LOW VOLTAGE COEFFICIENT
- GUARDED CONSTRUCTION

Ohm-Labs is the leader in high resistance standards, with hundreds delivered to labs worldwide.

The 100-H guarded high resistance 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. Hermetically sealed construction provides immunity from changes in barometric pressure and relative humidity. They are not affected by moderate vibration or shock. All models are housed in a rugged, die-cast aluminum case.

Connection is via type N connectors, isolated from the case. The connector shields are bridged by a resistor nominally equal to the standard, for guard voltage at measurement potential. Either terminal may be high.

Triax or BNC type connectors are available, and the standard can be wired for use as an electrometer calibration standard.



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A binding post provides grounding of the case. A 10 K (nominal, at 25 °C) thermistor is included to monitor the internal temperature of the standard. Connection is via standard 2 mm mini banana plugs.

Decade resistance values are standard; other values are available on request.

All models include ISO 17025 accredited calibration at two voltages, plus temperature coefficient determination.

All Ohm-Labs resistance standards are warranted five years from date of shipment.

Model Number	Nominal Resistance	Initial Tolerance in ppm	Temperature Coefficient (less than)	Voltage Coefficient (less than)	6 month Stability	12 month Stability	Recom. Voltage
Smaller case size models							
106-H	1 Meg	5	1 ppm / °C	0.1 ppm / V	<3 ppm	<5 ppm	10
107-H	10 Meg	10	3	0.1	5	10	20
108	100 Meg	20	10	0.1	10	20	50
109	1 Gig	35	25	0.1	15	25	100
110	10 Gig	50	35	0.1	25	50	100
Larger case size models							
111	100 Gig	200	30	0.2	50	100	200
112	1 Tera	500	50	1	100	200	500
113	10 Tera	1000	500	3	500	1000	500

**Notes:**

Temperature coefficient is at nominal 23 °C +/-5°C.

Voltage coefficient is at recommended -50 % / +100 %

Max V: 106 1 kV, 107 3 kV, 108-110 10 kV, 111-113: 15 kV

**Physical:**

106-110: 178 x 75 x 100 mm / 7 x 3 x 4 in; 1.5 kg / 3 lbs

111-113: 228 x 125 x 125 mm / 9 x 5 x 5 in; 2.5 kg / 5 lbs

**Accessories available:**

1 m thermistor cable, 2-wire

Transit case for single or multiple standards



ISO 17025 accredited calibration included

