

100-SERIES HIGH RESISTANCE STANDARDS

- RESISTANCE FROM 1 M Ω TO 10 T Ω
- EXCELLENT STABILITY
- HIGH IMMUNITY FROM ENVIRONMENTAL EFFECTS
- FULLY GUARDED



Ohm-Labs' 100-series 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. Low reactance allows their use as DC or AC standards. All models are housed in a rugged, die-cast aluminum case.

Connection is via male silver plated British Post Office (BPO) plugs, with a center pin conductor and outer shield. The shield is for a guard circuit driven at measurement potential. Either terminal may be high. BPO to BNC connectors are available.

The guards are internally connected by a high value resistor, to provide a guard current path.

A 5-way insulated binding post for banana plugs or spade lugs is provided for grounding 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 banana plugs.

Optional accessories include BPO to BNC adaptors (male or female), and BPO to BNC adaptor cables. Decade resistance values are standard; other values are available on request.

All models include ISO17025 accredited calibration at two voltages.

Model Number	Nominal Resistance	Tolerance in ppm	Temperature Coefficient	Voltage Coefficient	6 month Stability	12 month Stability	Recom. Voltage
Standard case size models							
106	1 Meg	5	<1 ppm / °C	<0.1 ppm / V	<3 ppm	<5 ppm	10
107	10 Meg	10	< 3	1	5	10	20
108	100 Meg	20	10	1	10	20	50
109	1 Gig	50	25	1	15	25	100
110	10 Gig	100	25	5	25	50	100
Larger case size models							
111	100 Gig	200	50	5	50	100	200
112	1 Tera	500	200	5	100	200	500
113	10 Tera	1000	300	10	250	500	500

Notes:

Tolerance is at time of manufacture.

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

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

Max V: 106=100 V, 107=300 V, 108-110=1000 V, 111-113=3000 V.

Physical:

106-110: 178 x 75 x 100mm / 7" x 3" x 4"; 1.5 Kg / 3#

111-113: 228 x 125 x 125mm / 9" x 5" x 5"; 2.5 Kg / 5#

Accessories available:

BPO female to BNC (M or F) adaptor

1 m cables: BPO F to BNC

