

SERIES 9337
ULTRA HIGH VALUE RESISTANCE STANDARDS

VERY HIGH STABILITY CALIBRATION LABORATORY STANDARDS



Guildline 9337 series of Resistance Standards are designed as very high stability calibration laboratory standards for accurate resistance calibration in air, between 1 Teraohm and 10 Petaohm in decade steps. These new resistors complement the 9334 and 9336 Resistance Standards available from 1 ohm to 100 Gigaohm with many intermediate values for special applications. They can be used as working standards or reliable, ruggedized, transportable transfer standards.

The 9337 Ultra High Value Resistance Standards provide additional range checking for the calibration of the Guildline Teraohmmeter, Model 6500A and the calibration of other ultra high ohms measuring instruments above 1 Teraohm.

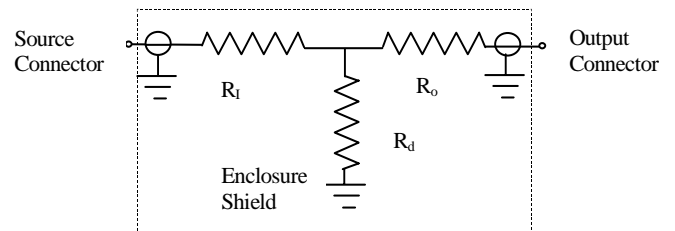
The resistor elements are securely mounted to the inside of a rugged hermetically sealed, shielded, aluminum enclosure. A pair of input/output Type N connectors provide the termination for the standard. The "SOURCE" connector connects to the power supply of the measurement system, while the "OUTPUT" connector connects to the measurement detector.

9337 FEATURES

- > Very High Stability
- > Range 1T Ω to 10P Ω
- > Low Temperature Coefficient
- > Operating Range 18 °C to 28 °C
- > Hermetically Sealed
- > Rated to 1000V
- > Low Power Coefficient
- > Report of Calibration traceable to INMS/NRCC included
- > Compact & Ruggedized
- > Suitable for calibration of teraohmmeters

The 9337 Series Ultra High Value Precision Resistance Standards are available between 1TΩ and 10PΩ in decade steps.

The 9337 Standard Resistors are 3 terminal devices. The 3 terminal design minimizes the effect of current leakages from the source and output connectors. The high stability is achieved by use of a resistance divider network of the form shown.



9337 RESISTANCE STANDARDS

9337 SERIES SPECIFICATIONS

Model	Nominal Resistance Value (Ohms)	Nominal Initial Tolerance (Note 1)	Calibration Uncertainty @ 23 °C (Note 2)	Stability 12 Months (ppm)	Temp. Coeff. 18 -28 °C (±ppm/°C)	Voltage Coeff. (ppm/Volt) (Note 3)
9337-1T	1T	1000	1000	500	< 300	< 2
9337-10T	10T	3000	3000	750	< 500	< 2
9337-100T	100T	5000	5000	1000	< 800	< 2
9337-1P	1P	3%	2%	2000	< 1000	< 2
9337-10P	10P	30%	25%	2%	<5000	<5

Note 1: Nominal Initial Tolerance is the maximum variation of the mean value as adjusted at the point of sale.

Note 2: Calibrated at 23 °C, referred to the unit of resistance as maintained by the National Research Council of Canada or the National Institute of Standards and Technology and expressed as a total uncertainty with a coverage factor of k = 2.

A test report giving the measured value and uncertainty is provided with each resistor.

Note 3: Maximum Voltage Rating: 1000 Volts

Note 4: Special Values available on request.

ORDERING INFORMATION

9337/ohmic value-
TM 9337

Resistance Standard
Technical Manual (included)
Cert of Calibration (included)
Report of Calibration (included)

GENERAL SPECIFICATIONS

Environment Operating 18 °C to 28 °C < 50% RH
non-condensing
Storage -20 °C to 60 °C
15% to 80% RH

Dimensions: H 82 mm (3.2 in)
W 124 mm (4.9 in)
D 79 mm (3.1 in)

Weight: 0.63 kg (1.4 lbs)

GUILDLINE IS DISTRIBUTED BY:

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