

#### SERIES 9336

## HIGH VALUE RESISTANCE STANDARDS

#### VERY HIGH STABILITY HIGH VALUE CALIBRATION LABORATORY STANDARDS



uildline 9336 series of Resistance Standards are designed as very high stability calibration laboratory standards for accurate resistance calibration in air, between 10 Megohms and 100 Gigaohms.

These resistors are also suitable for use as calibration standards for the Guildline Teraohmmeter, Model 6500A and the calibration of other high ohms measuring instruments.

They can be used as working standards or reliable, ruggedized, transportable transfer standards. They are extremely useful for the calibration of resistance ranges of multi-function calibrators and high accuracy digital multimeters, as well as being used in more classical standards and calibration laboratory applications where the need for high accuracy high ohms values are required.

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 9336 Series Precision Resistance Standards can be used for laboratory or portable applications requiring high accuracy at large resistance values.

The "SOURCE" connector connects to the power supply of the measurement system, while the "OUTPUT" connector connects to the measurement detector. If necessary, the ambient temperature of the enclosure may be monitored and a correction factor applied to the value of the resistance.

### 9336 FEATURES

- > Very High Stability
- > Range 10M  $\Omega$  to 100G  $\Omega$
- > Operating Range 18 ℃ to 28 ℃
- > Hermetically sealed
- Report of Calibration traceable to NIST or INMS/NRCC included
- > Compact & Ruggedized
- > Low Temperature Coefficient
- Rated to 1000 V
- > Low Power coefficient
- Suitable for calibration of Teraohmmeters, Meggers, long scale DMMs, & Ohmmeters

#### 9336 SERIES SPECIFICATIONS

Model	Nominal Resistance Value (Ohms)	Nominal Initial Tolerance (± ppm) (Note1)	Calibration Uncertainty @23 °C ±1 °C (± ppm) (Note 2)	Stability 12 Months (± ppm)	Temp. Coeff. 18-28 °C (ppm / °C)	Voltage Coeff. (ppm/volt) (Note 3)
9336-10M	10M	25	10	10	<5	0.1
9336-100M	100M	50	15	25	<5	0.5
9336-1G	1G	100	80	35	<6	0.5
9336-10G	10G	200	100	100	<25	1
9336-100G	100G	500	500	200	<250	1

Note 1: Initial Tolerance is the maximum variation of resistance mean value as adjusted initially 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 (NRCC) or the National Institute of Standards and Technology (NIST) and expressed as a total uncertainty with a coverage factor of k = 2.

A traceable calibration report stating 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**

9336-ohmic value TM 9336 Resistance Standard

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

#### GENERAL SPECIFICATIONS

**Environment:** Operating 18 °C t

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:**

#### **Guildline Instruments Limited**

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