Measurements International

Metrology is Our Science, Accuracy is Our Business™

9331R PRECISION STANDARD AC/DC REFERENCE RESISTORS

Featuring

- High Stability
- 0.1 Ω to 100 MΩ
- Operating Range 18 °C to 28 °C
- Custom Values Available
- Metal Foil Technology
- Ultra Low Temperature Coefficient
- Typical AC/DC Error < 1 ppm Up to 1 kHz

Feature	Benefit
Unmatched stability.	Provides confidence in uncertainty calculation.
Low temperature coefficient.	Lower uncertainties.
Custom values available.	Gives you the solution you need for your application.
Metal film technology.	Excellent AC/DC agreement.
Industry leading warranty.	3 years.

9331R PRECISION STANDARD AC/DC REFERENCE RESISTORS

Through years of technological experience developing the most accurate and stable resistance standards available, Measurements International has developed the model 9331R Reference Series of Precision Standard Air Resistors.

This 9331R series air resistor was developed to close the gap between high accuracy and high stability oil resistors with the air resistor market. By releasing the 9331R series of air resistors, customers now have an alternative to using oil resistors and still achieve superior measurement results.

The 9331R employs multiple oil-filled resistive and coil elements housed in a sealed enclosure.

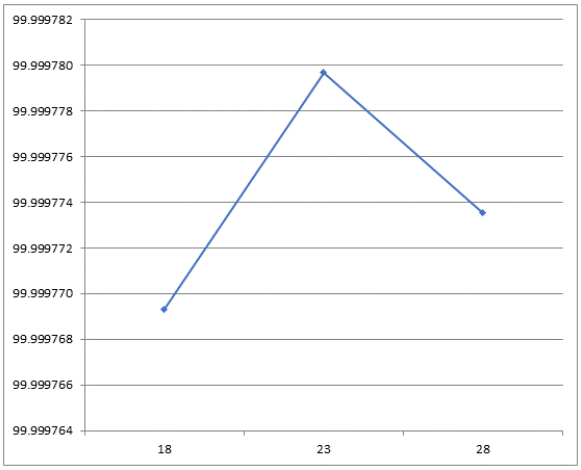
The resistance standards require no temperature controlled oil or air baths to achieve their specifications.

However, for optimal performance as a primary set of resistors, it is recommended that the resistors be placed in the Measurements International's model 9300A Air Bath.

Connections to the 9331R are made using silver-plated tellurium copper binding posts. A separate ground is included for grounding the case.

Interconnecting cable may also be ordered with the 9331R Resistance Standards. The interconnecting wire comes in either two- or four-conductor configurations. The wire may be ordered in lengths with screens already attached or in 100 metre rolls. No. 18 gauge solid copper, silver-plated, screened Teflon cable is recommended.

Each 9331R comes with a calibration report including the assigned value and temperature coefficient data.



Measurements International

Metrology is Our Science, Accuracy is Our Business™

9331R PRECISION STANDARD AC/DC REFERENCE RESISTORS

Specifications: Rev 3

Model	Nominal Value (ohms)	Tolerance ± ppm*	First Year Drift (ppm)	Stability 12 Month (ppm)	Max Current (A)	TC at 23 °C ± 1 °C (ppm/°C)	Maximum Voltage (V)
9331R/0.1	0.1	10	2.5	1	1	0.1	0.1
9331R/1	1	10	2.5	1	0.316	0.1	0.32
9331R/10	10	2	2.5	1	0.1	0.1	1.0
9331R/25	25	2	2.5	1	0.063	0.1	1.58
9331R/100	100	2	2.5	1	0.031	0.1	3.16
9331R/1 k	1 k	2	2.5	1	0.01	0.1	10.00
9331R/10 k	10 k	2	2.5	1	0.003	0.1	31.62
9331R/100 k	100 k	2	2.5	1	0.001	0.1	100.0
9331R/1 M	1 M	2	2.5	1	0.0003	0.2	300.0
9331R/10 M	10 M	5	10	10	0.0001	5	1000.0
9331R/100 M	100 M	10	20	10	0.00001	5	1000.0

* Tolerance – Defined as the potential variance from the nominal resistance value at the time of manufacture. Due to the natural aging process, it is recommended that the resistance value be monitored closely for the first year of ownership.

Dimensions (L × W × H):
200 × 100 × 81 (mm)

Weight:
1 kg

Shipping Weight:
Provide with Quote

Main Power:
N/A

Corporate Headquarters
Measurements International
PO Box 2359, 118 Commerce Drive
Prescott, Ontario, Canada K0E 1T0

Phone: 613-925-5934
Fax: 613-925-1195
Email: sales@mintl.com

Toll Free: 1-800-324-4988

Worldwide Offices
MI-USA
Phone: 407-706-0328
Email: sales@mintl.com

MI-China
Phone: +(86) 10-64459890
Email: sales@mintl.com

MI-Europe
Phone: +(420) 731-440-663
Email: sales@mintl.com

MI-Japan
Phone: +(81) 72 39 64 660
Email: kaz@mijpn.com

MI-India
Phone: +(91) 98 10 134 932
Email: sales@MILLP.co.in