



STANDARD AIR RESISTOR

- ISO 17025 Calibrations Available
- High Stability
- 1 $\mu\Omega$ to 100 M Ω
- Operating Range 18 °C to 28 °C
- Custom Values Available
- Low Temperature Coefficient
- Stability Better Than 2.5 ppm/Year
- No Air or Oil Bath Required

MODEL 9331



MODEL 9331 STANDARD AIR RESISTOR

The Measurements International 9331 series of Precision Standard Air Resistors provide high accuracy and stability, for precision, on-site, resistance calibrations for values from 1 $\mu\Omega$ to 100 M Ω . The small, light and rugged resistance standards are ideal for use as working standards and are often used as artifacts in inter laboratory comparisons.

Stability and temperature coefficients of the 9331 make this resistor ideal for easy transport and for operation in any working environment within the range of 18 to 28 °C. 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 Model 9331 are made using tellurium copper binding posts for values to 100 M Ω .

A separate ground terminal is included for screening and the case is hermetically sealed to keep moisture out. Interconnecting cable may also be ordered with the 9331 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-meter rolls. No. 18 gauge solid copper, silver-plated, screened Teflon cable is recommended. Four-conductor cable is recommended to 1 M Ω and two-conductor cable for values above 1 M Ω .

Special values also available at customer request.





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Specifications: Rev 12

Model	Nominal Value in Ω	Tolerance \pm ppm*	Stability ppm/year	Max Current (A)	TC 23°C \pm 5°C \pm ppm/°C	Max Voltage (V)
9331/0.001	0.001	10	15	6	1.5	0.006
9331/0.01	0.01	5	10	3	0.5	0.03
9331/0.1	0.1	4	4	1	0.3	0.1
9331/1	1	2	2.5	0.3162	0.4	0.32
9331/10	10	2	2.5	0.1	0.4	1.0
9331/25	25	2	2.5	0.0632	0.4	1.58
9331/100	100	2	2.5	0.0316	0.4	3.16
9331/200	200	2	2.5	0.0224	0.4	4.47
9331/300	300	2	2.5	0.0183	0.4	5.48
9331/400	400	2	2.5	0.0158	0.4	6.32
9331/1 k	1 k	2	2.5	0.01	0.4	10.00
9331/10 k	10 k	2	2.5	0.0032	0.4	31.62
9331/12.9 k	12.9 k	2	2.5	0.0028	0.4	35.92
9331/100 k	100 k	2	2.5	0.001	0.4	100.0
9331/1 M	1 M	2	2.5	0.0003	0.4	316.2
9331/10 M	10 M	5	10	0.0001	5	1000
9331/100 M	100 M	10	25	0.00001	5	1000

* Tolerance - Defined as the potential variance at 23 °C 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 x W x H):

126 x 80 x 60 (mm)

Weight:

1 kg

Shipping Weight:

Provide with Quote

Main Power:

N/A

Corporate Headquarters

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