

RTD Simulators

Product Sheet



Perfecting Ultra High Precision Calibration

RTD Simulators are used as calibration devices to ensure the accuracy of applications that use resistance temperature detectors (RTD)

Simulate virtually any reference temperatures to test and calibrate equipment — either in the lab or in the field

Certifications available — NIST, JIS C1604, IEC60751

Compliant to all international temperature scale standards (like IPTS-68, ITS-90)

Bulk Metal® Foil technology — Ideal for testing and calibrating

Extremely low temperature coefficient of resistance (TCR) to ± 0.2 ppm/°C typical

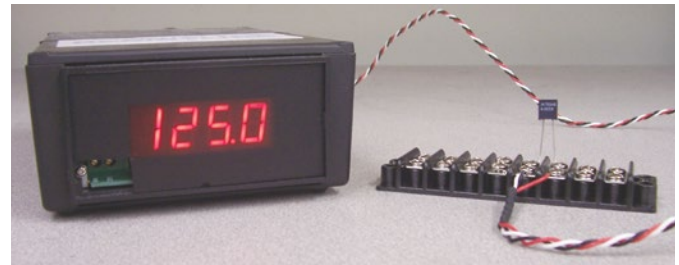
Unparalleled inherent long-term stability to 50 ppm for 10,000 hours of load

RTD Simulator Resistors from Vishay Foil Resistors

Simulate fixed reference temperatures
Mobile, highly stable, rugged, cost effective

PERFORMANCE HIGHLIGHTS

Any 6-digit value in the resistance range for virtually unlimited temperature simulation possibilities
Load-life stability: to $\pm 0.005\%$ (50 ppm) at $+70^{\circ}\text{C}$, 10,000 hours rated power
NIST certification available
Extremely low TCR: ± 0.2 ppm/ $^{\circ}\text{C}$ typical (-55°C to $+125^{\circ}\text{C}$, $+25^{\circ}\text{C}$ ref.)



RTD Simulators can be supplied tailor-made to your needs.



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ADR-3204GR Precision Programmable Resistance Box from Alpha Electronics

Digitally controlled resistance simulator
Simulates any resistance values from 5Ω to $199.9999\text{ k}\Omega$ to an accuracy of $\leq 0.01\% \pm 2\text{ m}\Omega$
Front panel control or fully automated via PC connection to testing environment, e.g., during production in order to minimize inspection time while avoiding human error



PERFORMANCE HIGHLIGHTS

Controllable by PC with GB-IB and RS232C interfaces

Accuracy: $\leq 0.01\% \pm 2\text{ m}\Omega$

Quick switching times of 100 ms due to specially designed relays

Stable resistance output—true resistance value by ultra precision Bulk Metal® Foil resistors instead of electrical output simulation

JIS C1604/IEC60751 certified Pt thermometer table is stored in memory to facilitate entry of specific temperatures or specific resistance values in the Pt standard table (Pt100, Pt200, Pt300, Pt500, Pt1000)

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