

STANDARD RESISTORS:

In addition to the supply of calibrated new Standard Resistors we can help with the re-calibration of your existing standards.

Standard Resistor Calibration

Low Uncertainty with a Fast-flexible Service

Highest accuracy temperature measurements rely on the best SPRTs, Thermometry Bridges and Standard Resistors. For the standard resistors, it is vital that they have a low calibration uncertainty. Isotech are able to calibrate your primary standards to the lowest of uncertainties. *With our priority booking-in service, turnaround times can be as low as one week!*



DC Calibration Uncertainties $k = 2$
For High Quality Resistors, e.g. Wilkins / Swan Design

Resistor value	Uncertainty; $k = 2$
1 Ω	$<\pm 0.09$ ppm
5 Ω	$<\pm 0.09$ ppm
10 Ω	$<\pm 0.08$ ppm
25 Ω	$<\pm 0.08$ ppm
100 Ω	$<\pm 0.08$ ppm
400 Ω	$<\pm 0.1$ ppm

(Other values and services are available, contact us for details)

Isotech can calibrate your standard resistors to $<\pm 0.08$ ppm



The test resistors are placed in the Isotech Model 455 Resistor Maintenance Bath and allowed time to stabilise. Measurements are then made using the world-leading microK Thermometry Bridge, comparing the test resistor against our own calibrated reference resistors. The microK is used in the world's leading NMIs and has a ratio accuracy of < 20 ppb (unity ratio).

Isotech's laboratories are UKAS accredited (Accreditation No. 0175). UKAS is the United Kingdom member of the International Laboratory Accreditation Cooperation (ILAC). The laboratories at Isotech are audited annually by UKAS and its technical assessors, who are some of the world's leading authorities on temperature metrology, for competence and compliance with the requirements of the International Standard ISO/IEC 17025:2017.

Help and Advice

If you have any questions, if you need any advice, if you would like a free consultation then please get in touch