

Calibrators and Precision Calibration Checkers

Products include the Calog multi function calibrator as well as the Microcal and Microcal Plus calibration checkers. Also, the °Cal-check Precision Thermocouple Calibration Checkers offer a unique, novel concept for rapid, simple and convenient in-house traceable calibration checking of thermocouple instrumentation.



Multi-Function Temperature Calibrator

XE-6080-001

The Calog TEMP Calibrator is ideal for testing, measuring and calibration of all Thermocouple and RTD based systems. In addition, it contains functions to install and maintain all powered and non-powered milliamp loops.

The Calog TEMP is a high precision, multi-functional, hand-held calibrator suitable for the process control industry. Its speciality is Thermocouple (TC) and Resistance Temperature Detector (RTD) based instruments which it can measure and source.

Simultaneous measuring of Milliamps whilst sourcing Millivolts or Ohms or TC or RTD is possible. The Trend feature is ideal for graphing temperature profiles and PID controller optimization. Datalogging is done by using the SD card facility and can be downloaded via the USB port.

- Measure, source or simulate 0 to 24 mA
- Measure and source -10 to 100 mV
- Measure and source 0 to 400.00 Ω and 0 to 2200.0 Ω
- Measure and source types K, J, T, B, R, S, E, N, U and L thermocouples with configurable internal, external or manual cold-junction compensation in either $^{\circ}\text{C}$, $^{\circ}\text{F}$, Kelvin or Rankine
- Measure and source Pt50, Pt100, Pt200, Pt500, Pt1000, Ni100 and Ni120 type RTD sensors



- Continuity test function
- Increment, step, ramp or valve stroking with built-in 24V power supply for mA loops
- Datalogging facility via SD card which is downloadable using the USB port
- Trend logging feature with programmable time base
- Carry case, protective rubber boot, Li-ion battery, charger, test leads, CJ Compensation box and SD card supplied as standard

°Cal-check Hand Held Precision Thermocouple Calibration Checker

°Cal-check

Cold Chain / Catering / Baking & Cooking / General Industrial

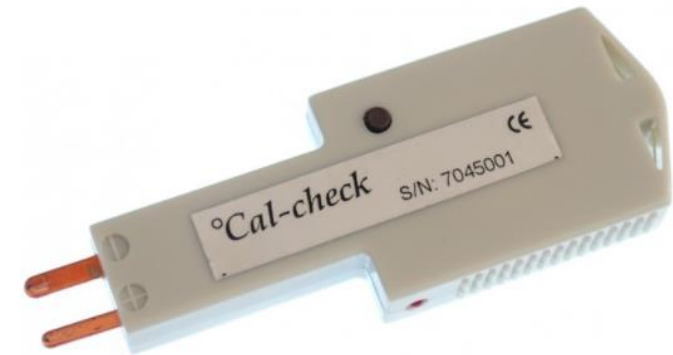
The °Cal-check is a unique, novel concept for rapid, simple and convenient in-house calibration checking of thermocouple instrumentation, eliminating the need to send it away for laboratory calibration.

The compact, low cost device, terminated with miniature, male pins is simply plugged into the input port of the instrument. Comparison of the displayed reading is compared with the value stated on the °Cal-check label to indicate the accuracy of the test instrument.

The °Cal-check is switched on after insertion and automatically switches off after 60 seconds resulting in a long battery life. If the checker is inadvertently left connected to the instrument, it will go into sleep mode to minimise power consumption. A LED indicates if the checker is operational or if the battery needs replacing; the checker will not produce a reading if the battery is 'low'.

Nine Type K & T thermocouple ranges are available to suit a wide range of applications including food production & storage, dairy and brewing processes and ovens.

- Quick, accurate calibration checking of thermocouple instruments
- Plug-in, press button & read – no PC needed
- No more need to send instruments away for calibration
- No wiring or range setting –simple checking by anyone



Type	Type K or T available
Accuracy	+/-0.25°C at 23°C ambient temperature
Resolution	0.1°C
Host Instrument Input Impedance	10k Ohm minimum
Temperature Coefficient	18-28°C ambient temperature, better than +/-0.5°C. 0-50°C ambient temperature, +/-0.5 °C
Storage Temperature Range	-20 to 70°C
Ambient Operating Temperature	0 to 50°C, 18 to 28°C recommended
Power	Battery life: typically 2400 operations; 5 years' shelf life

MicroCal 1 Thermocouple Simulator (Types K, J, T, R, N, S, E)

XE-3981-001

The MicroCal 1 thermocouple simulator helps ensure that the frequent checking of thermometer accuracies is a routine operation. The calibrator is designed to simulate a chosen temperature to test thermocouple type K, J, T, R, N, S and E thermometers without the need for specialised equipment or conversion tables. The MicroCal 1 Plus calibrator also measures and simulates temperature.

The MicroCal 1 features a custom 10mm LCD display with alpha-numeric display line to prompt the user when changing parameters. Selectable parameters include: °C/°F, auto power off - enable/disable, CJC - internal/external and display contrast adjustment.

Each MicroCal is supplied with a one metre PVC type K thermocouple lead with miniature connectors and a five point UKAS Certificate of Calibration which indicates deviations from standards at the various points.

Thermocouple type K - range -200 to 1372°C
Thermocouple type J - range -200 to 1200°C
Thermocouple type T - range -270 to 400°C
Thermocouple type R - range 0 to 1768°C
Thermocouple type N - range -200 to 1300°C
Thermocouple type S - range 0 to 768°C
Thermocouple type E - range -140 to 1000°C

All thermocouple types are based on BS EN 60584-2:1993



- 12 adjustable temperature points
- Allows frequent checking of thermometer accuracies
- Tests thermocouple type K, J, T, R, N, S & E thermometers
- Microcal 1 plus also measures temperature as well as simulates
- Probe in images not included, please pick from the wide Labfacility range of probes to suit this product

MicroCal 1 Plus Simulator Thermometer (Types K, J, T, R, N, S, E)

XE-3982-001

The MicroCal 1 Plus thermocouple simulator and thermometer helps ensure that the frequent checking of thermometer accuracies is a routine operation. The calibrator is designed to simulate a chosen temperature to test thermocouple type K, J, T, R, N, S and E thermometers without the need for specialised equipment or conversion tables. The MicroCal 1 Plus calibrator both measures and simulates temperature.

The simulator features a custom 10mm LCD display with alpha-numeric display line to prompt the user when changing parameters. Selectable parameters include: °C/°F, auto power off - enable/disable, CJC - internal/external and display contrast adjustment.

An optional lead set is also available, that comprises of seven leads, one for each thermocouple type K, J, T, R, N, S and E. Each PVC lead is one metre long and incorporates two miniature thermocouple plugs.

Each MicroCal 1 Plus is supplied with a one metre PVC type K thermocouple lead with miniature connectors and a five point UKAS Certificate of Calibration which indicates deviations from standards at the various points.



Thermocouple type K - range -200 to 1372°C

Thermocouple type J - range -200 to 1200°C

Thermocouple type T - range -270 to 400°C

Thermocouple type R - range 0 to 1768°C

Thermocouple type N - range -200 to 1300°C

Thermocouple type S - range 0 to 1768°C

Thermocouple type E - range -140 to 1000°C