

CALOG - TEMP



with Datalogging



The **CALOG-TEMP** is a high precision, multi-functional, hand-held calibrator suitable for the process control industry. Its speciality is Thermocouple 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. Its small size, long battery life and high precision make the **CALOG-TEMP** ideal for industrial field calibration.



MEASURING



ANALOGUE INPUT RANGES

0 to 24mA
-10 to 100mV
Thermocouple types are the K, J, T, B, R, S, E, N, U, L

0 to 400.00Ω
0 to 2000.0Ω
RTD types Pt50, Pt100, Pt200, Pt500 and Pt1000
Ni100 and Ni120

Measurement of Ohms and RTD in 2,3 or 4-wire configuration
Continuity with a 100Ω trigger. Visual and audible confirmation

IMPEDANCE

Input impedance $\pm 17\Omega$
Input impedance $> 1M\Omega$
Input impedance $> 1M\Omega$

ACCURACY

0.02%FS
0.01%FS
0.01%FS*
(Excluding cold junction)
0.05%FS
0.05%FS
0.05%FS

RESOLUTION

1μA
1μV
0.1°C
0.01Ω
0.1Ω
0.01°C

SOURCING

ANALOGUE OUTPUT RANGES

0 to 24mA
-10 to 100mV
Thermocouple types are the K, J, T, B, R, S, E, N, U, L

1 to 400.00Ω
1 to 2200.0Ω
RTD types Pt50, Pt100, Pt200, Pt500 and Pt1000
Ni100 and Ni120

MAX LOAD

Output load max500Ω
Min. load 100Ω
10 - 400Ω
10 - 2k2Ω

ACCURACY

0.02%FS
0.01%FS
0.01%FS*
(Excluding cold junction)
0.05%FS
0.05%FS
0.05%FS

RESOLUTION

1μA
1μV
0.1°C
0.01Ω
0.1Ω
0.01°C

ISOLATION

The mV/TC/Ohms/RTD output from the **CALOG-TEMP** is isolated to a maximum rating of 100VDC from mA measure/source.

CALOG Calibrators

The CALOG range of process instrumentation calibrators are designed for servicing, repairs in the workshop and the plant environment. They are tough, sophisticated precision instruments that are portable, compact and user-friendly.

Robust enough to withstand the rigors of most industrial environments, they are powered by long-life Lithium Ion batteries and incorporate a clear, back-lit LCD graphic display.

For quick source value set-up, the CALOG uses the “key-per-digit” numeric setting feature that enables the user to scroll each digit up or down.

The graphic display can be selected to display the measured value or trend with programmable time base.

Features

- Small, rugged, handheld with a protective rubber cover.
- Graphic display of measured value, percent and battery status
- Datalogging with SD Card
- Programmable auto-off, restart at last setting and selectable display resolution
- Lithium Ion Battery pack, desktop charger, carry case, safety test leads and an external temperature compensation unit supplied as standard
- 2 year guarantee against faulty material or workmanship

Environmental

- | | |
|--|---------------------|
| <input type="checkbox"/> Operating temperature range | 0 to +50°C |
| <input type="checkbox"/> Storage temperature range | -20 to +55°C |
| <input type="checkbox"/> Humidity | <85% non-condensing |

Mechanical Specifications

- | | |
|--|--|
| <input type="checkbox"/> Dimensions (with the boot) | 86 x 155 x 43mm, IP54 rating (dust and splash proof) |
| <input type="checkbox"/> Dimensions (without the boot) | 77 x 149 x 34mm, IP54 rating (dust and splash proof) |
| <input type="checkbox"/> Protection | UL 94 V-0 flame retardant ABS plastic with rubber boot |
| <input type="checkbox"/> Weight | 340g |

General Specifications

- | | |
|---|--|
| <input type="checkbox"/> Display | 128 x 64 LCD graphic display with back-light |
| <input type="checkbox"/> Keypad | 16 Key embossed buttons |
| <input type="checkbox"/> Battery | Lithium Ion with temperature sensing |
| <input type="checkbox"/> Battery run life | Approx. 8 Hours, measure and source |

Error messages

- | | |
|---|---|
| <input type="checkbox"/> Over range | ^^^ with audible warning |
| <input type="checkbox"/> Under range | vvv with audible warning |
| <input type="checkbox"/> mA loop error | “loop error” with audible warning |
| <input type="checkbox"/> mA loop ohms to high | “check loop Ω ” with audible warning |

Distributed by

Cal Power

www.calogcalibrators.co.za

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