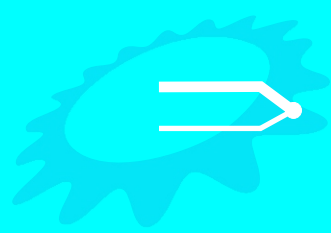


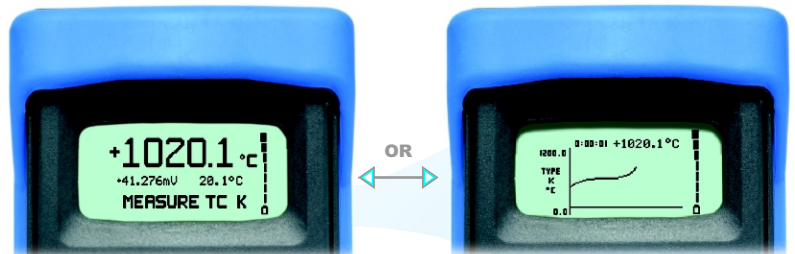
# CALOG - TC



The **CALOG - TC** is a high precision, multi-functional, hand-held calibrator suitable for the process control industry. It's speciality is thermocouple based instruments. It measures and sources, thermocouple, millivolts and milliamps. It can measure DC Volts and continuity. The trend feature is ideal for graphing temperature profiles and PID controller optimization. It's small size, long battery life and high precision make the **CALOG - TC** ideal for industrial field or workshop calibration.

Measures and sources types: J, K, T, E, R, S, B and N Thermocouples. Configurable internal or manual cold-junction compensation, in either °C, °F, Kelvin or Rankine. Accuracy is better than 0.5°C, excluding cold junction errors and thermocouple errors. The **CALOG- TC** has a resolution of 0.1°C. Measures and sources -10 to 100mV with 0.01% accuracy and 1µV resolution.

It can simultaneously source a thermocouple and measure mA (isolated). The trend feature is useful for temperature graphs or controller optimising.



## MEASURING

TC

mA

mV

V



### ANALOGUE INPUT RANGES

0 to 24mA

0 to 32V

-10 to 100mV

Thermocouple types are the K, J, T, B, R, S, E, N, C(W5) and D(W3) (IEC 584-3).

### IMPEDANCE

Input impedance  $\pm 17\Omega$

Input impedance  $\pm 110k\Omega$

Input impedance  $> 1M\Omega$

Input impedance  $> 1M\Omega$

### ACCURACY

0.01%

0.005%

0.01%

0.05%

### RESOLUTION

1µA

1mV

1µV

0.1°C

## SOURCING

### ANALOGUE OUTPUT RANGES

0 to 24mA

-10 to 100mV

Thermocouple types are the K, J, T, B, R, S, E, N, C(W5) and D(W3) (IEC 584-3).

### IMPEDANCE

Max load 500Ω

Min. load 600Ω

Min. load 600Ω

### ACCURACY

0.01%

0.01%

0.05%

### RESOLUTION

1µA

1µV

0.1°C

## ISOLATION

Max 100VDC between mV/TC output and mA input circuits

# 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 Nickel metal hydride batteries, monitored by 'fuel gauges' and incorporate a clear, back-lit 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
- ☐ Contain serial technology components for compact size, accuracy and reliability
- ☐ Programmable auto-off, restart at last setting and selectable display resolution
- ☐ NiMH Battery pack, charger, carry case, and test leads supplied as standard
- ☐ 1 year guarantee

## 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 on)    | 85 x 155 x 43mm, IP54 rating (dust and splash proof)   |
| <input type="checkbox"/> Dimensions (without the boot on) | 77 x 145 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 graphics display with back-lit LCD   |
| <input type="checkbox"/> Keypad       | 16 Key embossed buttons   |
| <input type="checkbox"/> Batteries    | NiMH battery pack with temperature sensing  |
| <input type="checkbox"/> Battery life | Approx. 10 Hours, loop power enabled sourcing 12mA<br>Approx. 50 Hours, loop power disabled |

## 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 $\Omega$ " with audible warning |