

# TC-08

## THERMOCOUPLE DATA LOGGER

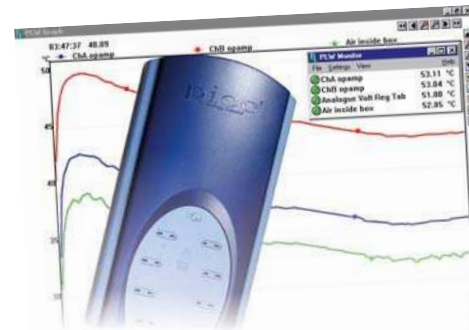
### LOW COST, HIGH RESOLUTION

- Measures and records up to 8 thermocouples
- Works with all popular thermocouple types
- Wide temperature range ( $-270^{\circ}\text{C}$  to  $+1820^{\circ}\text{C}$ )
- Built in cold junction compensation
- High resolution (20 bits) and high accuracy
- Up to 10 measurements per second
- No power supply required
- Supplied with PicoLog data logging software
- USB interface ensures problem-free installation
- Multiple units can be run on a single PC

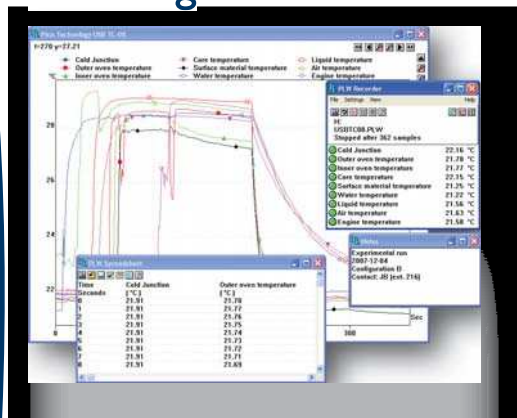


# TC-08 THERMOCOUPLE DATA LOGGER

The TC-08 thermocouple data logger offers industry-leading performance and a cost-effective temperature measurement solution. With 8 direct thermocouple inputs, the TC-08 can take accurate, rapid readings. In addition, up to 20 units can be used simultaneously on one PC. The logger can measure and record temperatures ranging from  $-270^{\circ}\text{C}$  to  $+1820^{\circ}\text{C}$  using the appropriate thermocouple type (B,E,J,K,N,R,S,T). It draws power from the USB port, so no external power supply is needed.



## PicoLog



In addition to the monitor view, PicoLog can also display a graph, a spreadsheet and user notes. It can display them all at once, as shown here, or individually in any combination.

PicoLog is a powerful but flexible data acquisition program designed for collecting, analyzing and displaying data over long or short periods of time. Data can be viewed both during and after data collection in spreadsheet or graphical format. If required, the data can also be easily exported to other applications.

## SOFTWARE DRIVERS

For users who wish to write their own software or use our products with third party software, we provide, free of charge, a range of software drivers and examples. Drivers are included for Windows XP (SP2), Vista and Windows 7 (32 and 64 bit). Programming examples are supplied for C, Delphi and Visual Basic, LabVIEW, Agilent VEE 6.1 and Excel.

## THERMOCOUPLES

Pico Technology offers both off the shelf and built to order thermocouples for use with our data logging products. The TC-08 is compatible with all popular thermocouples offering high accuracy without compromising acquisition speed. Thermocouple types and temperature ranges are shown in the table below.

| Type | Overall Range $^{\circ}\text{C}$ | $0.1^{\circ}\text{C}$ Resolution | $0.025^{\circ}\text{C}$ Resolution |
|------|----------------------------------|----------------------------------|------------------------------------|
| B    | 20 to 1820                       | 150 to 1820                      | 600 to 1820                        |
| E    | $-270$ to 910                    | $-270$ to 910                    | $-260$ to 910                      |
| J    | $-210$ to 1200                   | $-210$ to 1200                   | $-210$ to 1200                     |
| K    | $-270$ to 1370                   | $-270$ to 1370                   | $-250$ to 1370                     |
| N    | $-270$ to 1300                   | $-260$ to 1300                   | $-230$ to 1300                     |
| R    | $-50$ to 1760                    | $-50$ to 1760                    | 20 to 1760                         |
| S    | $-50$ to 1760                    | $-50$ to 1760                    | 20 to 1760                         |
| T    | $-270$ to 400                    | $-270$ to 400                    | $-250$ to 400                      |

## TC-08 SPECIFICATIONS

|                      |  |
|----------------------|--|
| Number of channels   | 8  |
| Temperature accuracy | The sum of $\pm 0.2\%$ and $\pm 0.5^{\circ}\text{C}$   |
| Voltage accuracy     | The sum of $\pm 0.2\%$ and $\pm 10\text{ }\mu\text{V}$ |
| Overload protection  | $\pm 30\text{ V}$                                      |
| Voltage input        | $\pm 70\text{ mV}$                                     |
| Reading rate         | Up to 10 per second                                    |
| Input connectors     | Miniature thermocouple                                 |
| PC connection        | USB  |
| Dimensions           | 201 x 104 x 34 mm                                      |

## ORDER CODES and PRICES

| ORDER CODE | DESCRIPTION    | £   | \$* | €*  |
|------------|----------------|-----|-----|-----|
| PP222      | TC-08          | 249 | 411 | 302 |
| PP624      | Terminal Board | 18  | 30  | 22  |

\* US dollar and euro prices are subject to exchange rate variations. For latest prices see our website or contact us at the address below.



The PP624 is an optional terminal board for the TC-08. The screw terminals allow wires to be attached to the data logger without soldering and enable the TC-08 to measure voltages from 0 to +5 V, or 4-20 mA loop current.