pico ®
Technology

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 °C to +1820 °C)

Built in cold junction compensation

High resolution (20 bits) and high accuracy

Up to 10 measurements per second

No power supply required

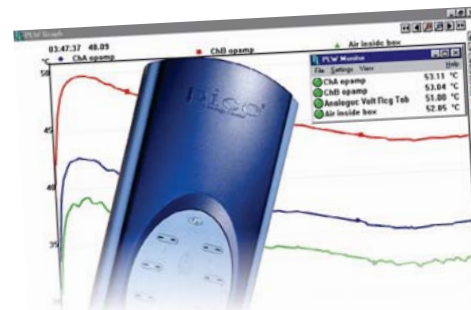Supplied with PicoLog data logging software

USB interface ensures problem-free installation

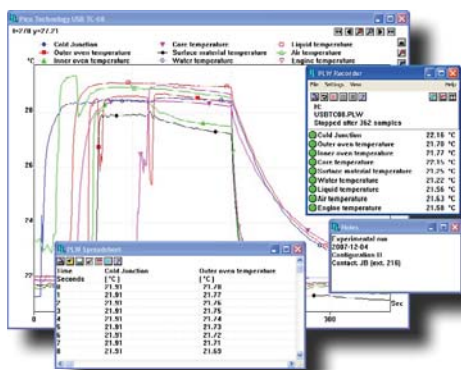Multiple units can be run on a single PC

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 °C to +1820 °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 (SP3), Windows Vista, Windows 7, Windows 8 (not Windows RT) and Windows 10 (32 and 64 bit). The SDK supports all C-compatible languages, and programming examples are supplied for C, Visual Basic for Applications (Microsoft Excel) and National Instruments LabVIEW.

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 °C	0.1 °C Resolution	0.025 °C Resolution
B	20 to 1820	150 to1820	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 ±0.2% and ±0.5 °C
Voltage accuracy	The sum of ±0.2% and ±10 µV
Overload protection	±30 V
Voltage input	±70 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	GBP*	USD*	EUR*
PP222	TC-08	249	409	349
PP624	Terminal Board	18	30	26

* Prices are correct at the time of publication. VAT not included. Please contact Pico Technology for the latest prices before ordering.

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.