

Thermocron Temperature Logger

Low-cost, small, robust



Thermocron Temperature Logger

What is a temperature logger?

Temperature loggers are thermometers with a memory. They continually monitor the temperature and record the value together with time and date in memory. These readings can then be sent to a computer to be viewed, analysed, saved and reloaded at a later date.

Why the Thermocron?

1. Value for money

We guarantee that the Thermocron is the lowest-priced temperature logger on the market. Price is no longer a barrier to continual temperature monitoring!

2. Cost savings

- The Thermocron logs temperatures automatically - staff members are no longer required to periodically read thermometers.

3. Product safety

- Confirm that your products reach your customers in optimum and safe condition or clearly identify when a problem occurred and how severe it was.

4. Construction

- Stainless steel housing - not plastic
- Almost indestructible - can be handled roughly
- Water-resistant - can be submersed, washed and sterilised

5. Size

- Incredibly small - it can be placed or hidden almost anywhere
- Can be made larger with fobs or other holders

6. Long life

- Re-usable to save even more money
- Battery life of up to 10 years or 1,000,000 readings

7. Performance

- The capacity of over 2,000 readings can give up to nearly 1 year's history.
- Once the memory is full the oldest readings are overwritten or recording stops.

8. Ease of use

- Thermocrons and eTemperature software can be used by non-technical members of staff with minimal training.

9. Secure and reliable audit

- Each Thermocron with its unique ID leaves an audit trail that cannot be tampered with. Staff or external service providers cannot enter or change readings to hide problems or errors.

Applications for the Thermocron

The Thermocron is perfect for environments in which a consistent, specific temperature is crucial to guarantee the quality and safety of your products or reputation.

It allows you to precisely determine what the temperature was at all times. Based on this information it can be established whether the temperature was within the specified range and your goods are safe and in satisfactory condition. If problems have occurred, it can be easily identified where and when.

Cold chain management

Monitor the entire cold chain for fish, meat, dairy, fruit and vegetable products. Ensure quality, minimise waste and increase the shelf life of your products.

Medical and pharmaceutical

Thermocrons can be used for the monitoring of vaccines and other temperature-sensitive pharmaceutical products to guarantee safety and quality.

Transport and shipping

Attach Thermocrons to individual products and pallets to keep track of temperatures throughout the entire logistics chain.

Supervision of catering equipment in cafes, fast-food outlets and restaurants

Establish a network of Thermocrons to log the temperature of stored and prepared food and ingredients.

Airconditioning systems

Place a Thermocron on site after commissioning a system, prior to a service, when a problem occurs or for ongoing performance monitoring.

Medical and agricultural research

Wherever a small, low-cost device is required to track temperatures in research projects under the toughest conditions, the Thermocron is the solution. It can even be submerged in water or inserted into soil.

Storage and warehousing

Thermocrons, attached to products, pallets or located at multiple points in the warehouse can independently log the temperature and humidity of your goods.



Thermocron Accessories

Kits = Software + Reader + Case

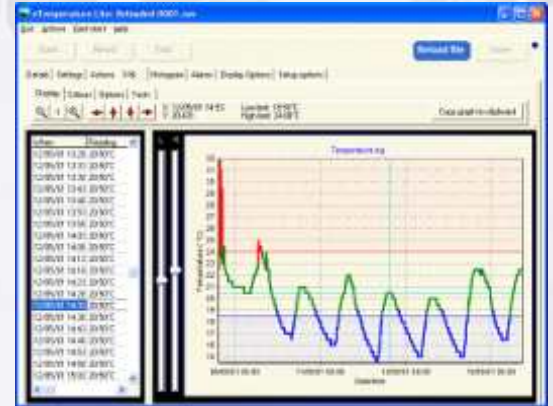
The eTemperature software, reader and case are supplied as a kit. The software can be freely copied onto multiple PCs and the reader moved between PCs. When multiple readers are required then additional kits must be purchased.

eTemperature Software

eTemperature allows you to quickly and easily:

- set up the Thermocron's sample rate, start delay, high and low alarm limits, and rollover option
- download the results from the Thermocron to the PC
- display the results as a table
- display the results as a graph. The graph supports panning and zooming to easily identify problems.
- save results for later recall.
- export results to Microsoft Excel, Microsoft Word, or email software
- simultaneously compare two result logs

Minimum PC Requirements: Pentium 200MHz, Windows 98 SP2, NT 3.5, 2000, XP, 32MB memory, 16MB free hard disk space, mouse, CD-ROM



Reader

A reader (also known as a cable or adaptor) is required to connect the Thermocron to the PC.

Serial port

A DB-9 connector plugs into the PC's serial (comm) port. The other end has two connectors for a Thermocron. Either connector can be used.

USB

The USB reader provides easy connection to modern computers. It also has two connectors for the Thermocron.



Plastic fobs (optional)

When size is not the issue

If size is not a key requirement then a plastic fob is recommended to assist in the handling and mounting of the Thermocron.

Fob2

The plain plastic fob is available in black, red, yellow, green and blue. The Thermocron clips into place.

Clear Fob

This fob is slightly larger and clear. This allows an identifier to be inserted. The standard identifier has a generic or a customised logo on one side and a sequential number on the reverse. An industrial strength double sided adhesive ensures the Thermocron will always stay attached.

For orders of 50 or more it is possible to have your own logo in the design.



TC-Spy

View (TC, TCZ and TCM models only)

Simply attach the TC-Spy to a Thermocron to find:

- If any temperatures have been too high or low,
- when they occurred
- and for how long.

Control - while the Thermocron is attached

- Stop the current mission
- Restart the Thermocron using the last settings



TC-Spy 2 & 4

The TC-Spy with extended memory. Ideal for collecting data from many Thermocrons without taking them to a PC. It saves time and doesn't interfere with readings.

Download

- Download the current mission from the attached Thermocrons
- Store up to 660 missions on TC-Spy 2 or 1320 missions on TC-Spy 4
- Transfer results from the TC-Spy to a PC and view in eTemperature

Thermocron Data Sheet

There are 6 models to chose from:

TC: The general logger

The TC model provides the broadest temperature range (-30°C to 85°C) to cover most applications. Its 0.5°C resolution is sufficient for most users.

TCZ: The cool logger

The TCZ (zero degrees) provides coverage of the -5°C to 25°C range making it ideal for refrigerated applications. Its 0.125°C resolution provides more detail when you need it.

TCH: The body logger

The TCH (human body temperature) provides coverage of the 15°C to 45°C range, making it ideal for body temperature monitoring as well as room temperature.

TCS: The general logger - advanced version

The TCS provides the broadest temperature range (-30°C to 85°C), expanded memory for more readings and two resolution modes.

TCX: The extreme logger

The TCX covers the temperature range of 0°C to 125°C making it suitable for high-temperature environments. It also provides expanded memory for more readings and two resolution modes.

HC: The temperature & humidity logger

The HC simultaneously logs both temperature (from -20°C to 85°C) and humidity (from 0%RH to 100%RH). The HC provides two temperature resolutions, 0.5°C or 0.0625°C, and two humidity resolutions, 0.6% or 0.04%.



Dimensions	17.35mm diameter, 5.89mm thick
Housing material	Stainless Steel
Water resistant	Yes (up to 10 metres)
Life span	Up to 10 years or 1,000,000 readings at less than 60°C
Re-usable	Yes
Initial delay	TC, TCZ and TCH: Up to 45 days TCS, TCX and HC: Up to 30 years
Log duration	= sample rate x log size
When log is full	Stop or over write oldest readings
Identification	Unique 48 bit numbers
HACCP Compliant	Yes

	TC	TCZ	TCH	TCS	TCX	HC
Min temperature	-30°C	-5°C	15°C	-30°C	0°C	-20°C
Max temperature	85°C	25°C	45°C	85°C	125°C	85°C
Resolution temperature	0.5°C	0.125°C	0.125°C	0.5°/0.0625°C	0.5°/0.0625°C	0.5°C
Min humidity	-	-	-	-	-	0%
Max humidity	-	-	-	-	-	100%
Resolution humidity	-	-	-	-	-	0.6% / 0.04%
Accuracy temperature	1°C ¹	1°C	1°C	0.5°C	0.5°C	1°C ¹
with calibration	0.5°C ¹	0.5°C°	0.5°C°			0.5°C ¹
Log size (readings)	2048	2048	2048	8192/4096	8192/4096	8192/4096
Sample rate	1min - 255min	1 min - 255min	1 min - 255min	1min - 273hrs	1min - 273hrs	1min - 273hrs
Applications	General	Fridge	Room + Body	General		Temperature + humidity

¹ Between -10° and 60°C

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