

Thermocron temperature datalogger



Temperature datalogging at its smallest and most rugged.

Rating: Not Rated Yet

Price

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Manufacturer

Description

No product quite so pungently underscores the importance of freshness. If you want to give your customers a guarantee of quality in the products they buy, you may need to track time and temperature, keys to the freshness of many products.

The new Thermochron is a data logger that can go wherever thermally vulnerable products go, monitoring time and temperature and storing the data that helps you guarantee quality. The Thermocron easily attaches to containers of frozen or fresh foods, blood products, and chemicals or drug reagents, recording time and temperature during transport and storage. By logging the thermal experience of temperature-sensitive material, you can pinpoint responsibility for spoilage and take corrective action.

The Thermocron's embedded computer chip integrates a 1-Wire® transmitter/receiver, a globally unique address, a thermometer, a clock/calendar, a thermal history log, and 512 bytes of additional memory to store a shipping manifest.

The thermometer measures temperature from -40°C to +85°C in 0.5° increments, while the clock measures seconds to years accurately to +1 minute per month from 0°C to 45°C.

The recyclable Thermocron logs data for more than 10 years or up to 1 million temperature measurements.

Rugged Thermocron Attaches to Anything

About the size of a small coin, the 16mm Thermochron is so small you can attach it unobtrusively to any container surface or wall—on bottles, totes, boxes, crates, pallets, air cargo containers, refrigerators, semi trailers, railroad freight cars, and archival storage rooms. The Thermocron's stainless steel armor withstands dirt, water and rough treatment. You can step on it, splatter it with fish entrails, or drop it into an ice water bath—it continues to log effortlessly. Underneath the armor, a single silicon chip integrates a digital thermometer, clock/calendar and protected memory. The stored data is designed to be resistant to tampering from unscrupulous intermediaries. Attempts to alter the logged thermal history will be detected electronically.

Versatile Data Storage: Log and Histogram Formats

The Thermochron stores data in two different ways that serve different application needs. First, it can wake up to take 2048 time- and date-stamped temperature readings at equal intervals between 1 and 255 minutes, then store the data in a time-temperature log format.

Meanwhile, the Thermochron also simultaneously stores each temperature sample in a histogram.

The histogram memory consists of 56 bins in 2-degree increments; each bin holds 65,500 temperature readings for up to 10 years. The histogram method of data storage serves applications requiring either long-term monitoring or the ability to instantly assess thermal compromise. When storing blood or other biomedical products, it's critical to know that thermal exposure occurred; when it happened is not. The histogram instantly reveals whether user-defined high or low temperature thresholds have been exceeded, and for how long.

