THERMAL PROFILE SOLUTIONS

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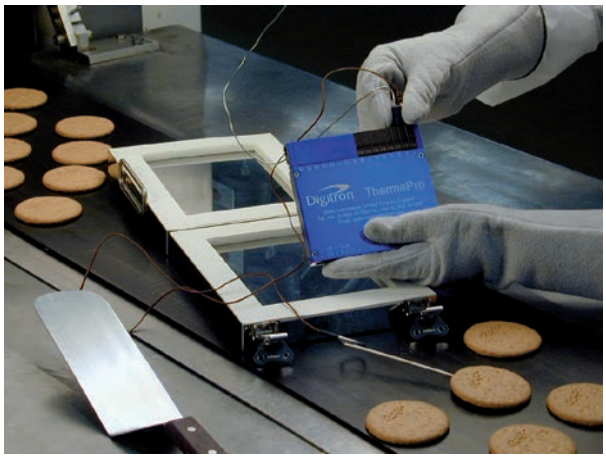
THERMAPRO 2

MULTI CHANNEL OVEN DATALOGGER



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THERMAL PROFILE SOLUTIONS

Multi- Channel Oven Datalogger for Accurate Temperature Profiling in the Food Industry

ThermaPro 2 is the latest generation of high accuracy datalogging instruments for use in extreme or harsh environments.

Suitable for applications where recording of temperature, RH or pressure is critical to the maintenance of product quality.

This datalogger is ideal for the Food Industry where process profiling is crucial to production efficiency and energy use optimisation.

ThermaPro 2 Configuration

Available in 4, 8 and 16-channel models, ThermaPro 2 dataloggers are user-configurable for any number of inputs up to the maximum available. Channels will accept input from Types E, J, K, N or T thermocouples, or from devices producing a voltage output. On each model, channels may be configured in two blocks (i.e., 2+2, 4+4, 8+8), each block accepting a different type of input.

Key Features

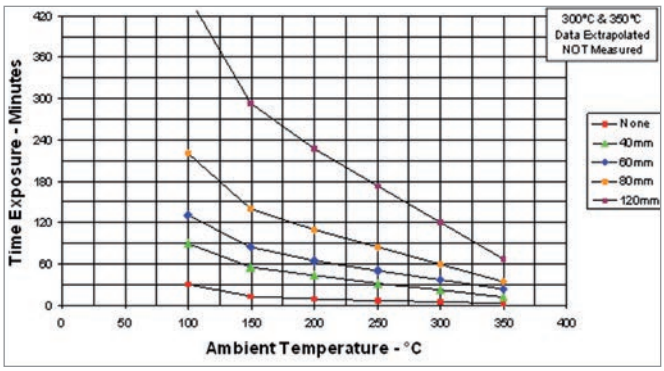
- Slimline design for ease of use in ovens/chillers
- 4, 8 and 16 channel options available
- Thermocouple or Voltage Inputs
- Over 14,000 samples each when all 16 channels are in use
- Over 130,000 samples when one channel is in use
- Temperature Measurement range -200ºC to +1000ºC (depends on thermocouple type)
- Range of Thermal Barriers
- Oven Temperature Range -90°C to +350°C (depends on thermal barrier)
- User configurable software

Benefits

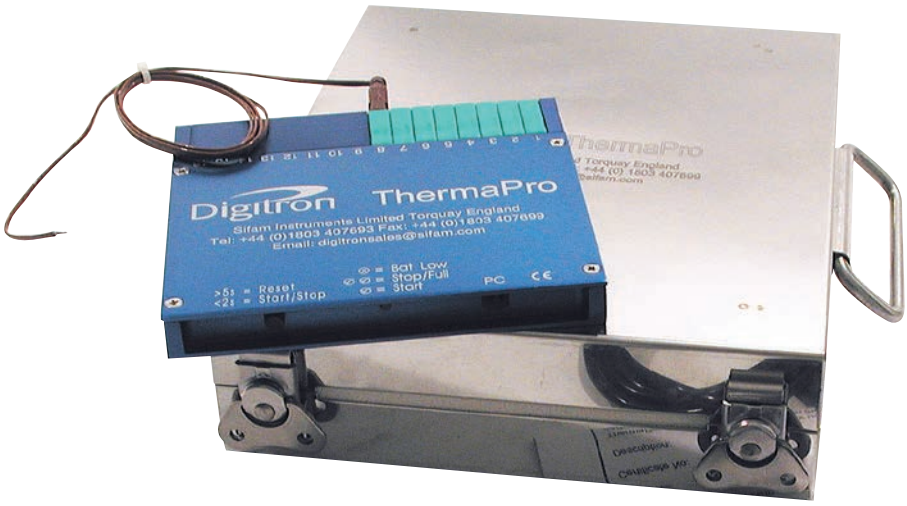
- Monitor process efficiency
- Diagnose problems
- Develop new processes
- Improve quality

ThermaPro 2 Thermal Barriers

Thermal barriers are an integral part of the ThermaPro system, and provide essential protection for the logger electronics against the high and low temperatures used in food industry processing. Use the graph below to select the appropriate barrier for your process application.



Before making your choice, you should consider the parameters of your process(es), and relate them to the graph. Many temperature-controlled processes include a number of pre-programmed temperature ramps. In such cases, total heat-energy exposure in terms of overall time may not be obvious. If you are not sure, please talk to your local distributor before you specify.



Digitron can produce special barriers for specific applications.

Under certain conditions, it is possible to dispense with a barrier - a considerable advantage where oven clearance is very small. However, we strongly recommend that total temperature exposure is carefully considered – please contact your local distributor for assistance.

ThermaPro 2 PC software

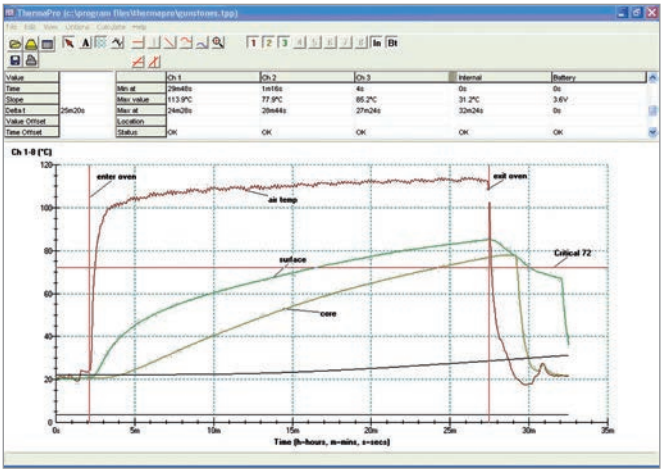
The software allows configuration of individual channels, setting of logger parameters and logged data to be downloaded and saved. There is also a comprehensive range of graphing facilities to rapidly analyse results on-screen, using ThermaPro's time and date stamped data. Operators can include user-selected parameters with logged data for oven/chiller/product performance and analysis. Data may also be exported to other PC-based graphics and analysis programmes.

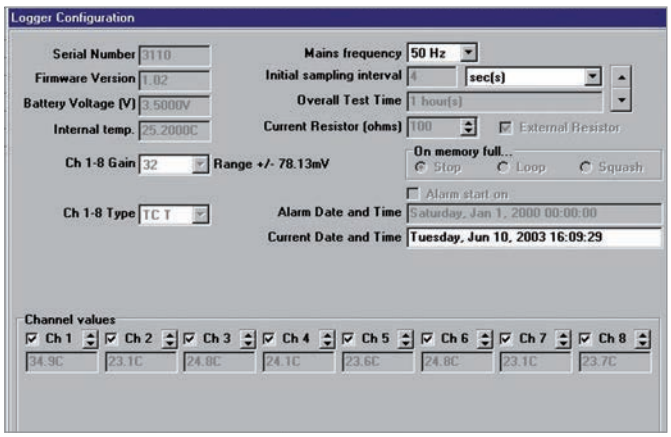
The Logger Setup section provides straight forward, intuitive channel configuration. It also allows features such as the sampling interval, noise filtering options, start/stop timings and the internal clock to be set.

By deliberately avoiding complexity, it allows first-time users to obtain high-quality results without lengthy familiarisation or training.

Software Key Features

- Windows compatible (95 – XP)
- Provides simple logger set up
- Full graphic display of up to 16 Channels with automatically or manually scaled time/temperature axes
- Separate vertical axes are displayed for temperature and voltage data. (Can be offset/scaled to read corresponding values across the display)
- User-defined annotations allow text to be added to graph
- On-screen information panel shows time and data value at pointer position
- User-set vertical (time) cursor shows all channel data values at cursor position
- User-set horizontal cursor shows time above, between and below important data values
- User-saved overlays allow you to show actual data compared to ideal performance
- Full range of edit functions and printing facilities





Specifications

Logger Operating Temperature	-20°C to +85°C (inside thermal barrier or without barrier)
Oven Temperature Range	-90°C to +350°C (depends on thermal barrier)
Sampling Interval	Up to 16 samples per second (dependent on number of channels)
Process duration:	Select an overall time covering process duration and the software will choose a sampling interval which maximises the number of sampling events spanning time selected.
Data security:	ThermaPro2 will not accept new data if previous data has not been downloaded. Status clearly indicated by front panel LED.
Clock / Delay Start:	Data stamped with time/date by onboard real-time clock. The clock also allows logger to start at a pre-selected time/date, allowing data gathering to begin without direct supervision.
Calibration:.	Automatic calibration validity check every time data is downloaded
Logger Dimensions	140 mm x 126 mm x 17mm
Thermal Barriers:	
TB40	40 mm x 220mm x 260mm
TB60	60 mm x 220mm x 260mm
TB80	80 mm x 220mm x 260mm
TB100	100 mm x 280mm x 280mm
TB120	120 mm x 280mm x 280mm
Instrument Accuracy	± 0.5°C
Resolution	0.1°C
Range	
Type E	- 270°C to + 1200°C
Type J	- 210°C to + 1000°C
Type K	- 270°C to + 1372°C
Type N	- 270°C to + 1300°C
Type T	- 270°C to + 400°C
Accuracy	± 0.01% FS or 20uV, whichever the greater
Resolution	1 mV to 1mV in 8 ranges
Range	± 9.7 mV to ±1.2 in 8 ranges
Channels	4, 8 or 16 available (ungradeable)

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