

## ***Thermal Profiling Data Logger – “PROfiler”***



### ***Thermal Profiling System – PROfiler***

An incorrect thermal profile in a reflow or wave soldering process is proven to cause failures in both electronic components and printed circuit board assemblies.

The most effective way to assess the thermal shock to components and PCB is to measure the actual on-board temperatures as it travels through the soldering machine.

Thermal Profiler “PROfiler” is a six channel high frequency RF temperature profiling system that allows temperature to be gathered and viewed in real time.

### ***High performance thermal profiling data logger***

- Standard thermal profiling unit is fitted with 6 Type-K thermocouple channels, offering unprecedented measurement accuracy;
- High performance data acquisition circuitry and digital filter techniques means accurate thermal profiles can be gathered with high levels of 50-60Hz mains noise rejection;
- Over 60,000 data points can be held within the temperature profiler’s memory, whilst RF realtime telemetry system shows the thermal profile as it happens;
- Using RF telemetry, a full screen temperature/time graph can be displayed in real time allowing process engineers to make rapid process decisions and minimise production downtime;
- Two way RF protocol is used between the thermal profiler and the PC, resulting in zero data loss during transmission.



Use the PROpredict feature within the software to analyse and modify your process settings without the need for repeated profile runs.

Save multiple types of information into a template for future production runs such as oven configuration, tolerance indicators, and thermocouple placement.

Print comprehensive SPC reports for your reflow and wave processes.

System accuracy	±1°C (±1.8°F)
Internal resolution	0.02°C (0.036°F)
Number of channels	6 Type-K
Sample period	100mS to 10secs
Storage	65000 data points
Measurement range	-150°C to 600°C (-237°F to 1112°F)
Batteries	Ni-Mh rechargeable batteries
Battery Life	600 runs (Intelligent battery management)
Data logger size	143 x 111 x 15mm (5.6 x 4.4 x 0.6")
Thermal Barrier size	202 x 135 x 28mm (8.0 x 5.3 x 1.1")

### Standard equipment

- 6 channel thermal profiler
- Rugged thermal barrier
- PC analysis software and download lead
- 6 Type-K thermocouples and leads
- Batteries and charger unit

### Options

- PROfiler adjustable carrier
- PROwave pallet
- RF or non RF formats
- Spare Type-K thermocouples (any specified length)

For more information please [contact](mailto:sales@circuitmaster.co.uk) our sales department.  
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