

**Do Your Thermal Cyclers Perform  
at the Correct Temperatures?**

**Using the TAS-System  
Will Give You the Answer!**

**HAIN**  
LIFESCIENCE

## Do Your Thermal Cyclers Perform at the Correct Temperatures?

### The TAS-System

The TAS-System is a powerful tool enabling the analysis of a thermal cycler's temperature performance. Key components include a control module with integrated real-time display, probe plates that accommodate either fixed or variable probes, and powerful PC software.

Despite being extremely powerful, the TAS-System is also very easy to use. Allow the TAS-Software to analyse the data for you and to automatically generate a detailed report for each test.

### The Control Module

All TAS-Systems include a high-precision control module which can be run in either standalone or computer-driven mode. In standalone mode the control module draws its power from its own integrated rechargeable battery, its LCD displaying real-time temperatures, scanning through all connected probes or indicating statistical data. When connected to a computer running the TAS-Software the true power of the TAS-System can be utilised: a full graphical temperature display, detailed statistical feedback, automatic analysis of temperature performance and automatic report/certificate generation.

### The TAS-Software

The TAS-Software provides all the information required for the full validation of thermal cycler temperature performance. View temperature performance in real-time on a classical line graph or on the novel plate view graphical display. When using one of the embedded test protocols the TAS-Software automatically analyses the trace for you, providing a wealth of statistical data across a range of temperatures, including accuracy, uniformity, overshoot and ramp rate. Available instantly upon completion of the test, this statistical data takes the form of a "Certificate of Test" and can be printed out for reference or stored or transmitted electronically in PDF form.

## The TAS-System Will Tell You!

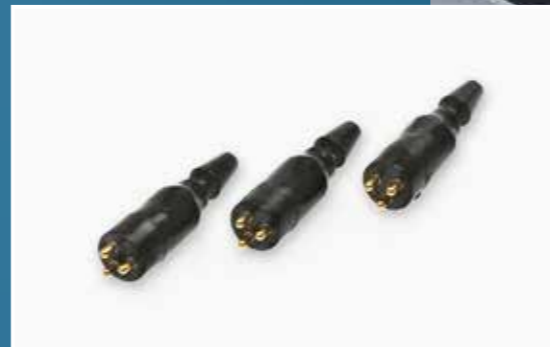
### The TAS-Probes

TAS-Systems can be supplied with a choice of plate type: fixed or variable.

The fixed probe plate offers a quality control tool for standard 96-well thermal cyclers. The probes are permanently fixed in position, simply place the plate onto the cycler for rapid analysis. If you are looking for an easy-to-use diagnostics tool for the majority of thermal cyclers then this is the choice for you.

The variable plate offers a unique level of flexibility. As the probes are interchangeable they can be positioned as required to tackle a specific requirement, for example detailed thermal gradient analysis or perhaps the targeting of a specific area of the block that is giving atypical performance. Non-standard block/well formats are also catered for as leaded probes can also be attached to the variable plate.

All probes carry their own unique identity which is automatically recognized by the software ensuring integrity of temperature data from one test to the next, whatever the probe positioning may be. Further assurance is provided through the use of separate precision reference probes which are available to allow immediate on site verification of the TAS-Controller's own performance.



# Profit from the TAS-System's Advantages!

## Simple, Quick Operation

Measure and analyse thermal cycler temperature performance in under 10 minutes, the TAS-System allows for visual comparison from test to test and enables performance tracking over the lifetime of the thermal cycler.

## Flexibility

As well as its standard fixed probe plate, the TAS-System is offered with a variable probe plate option. This utilises individually interchangeable temperature probes that can be placed in any of its 96 well positions. Combined with leaded-probes, the variable probe plate offers yet further flexibility, becoming the ideal solution for testing of non-standard thermal cyclers.

## Measurement Integrity

Each interchangeable TAS probe is uniquely identified, allowing for the automatic detection of probe position, the application of specific calibration data for each probe, and a calibration expiry warning when relevant.

## Validity of Results

Every TAS probe is calibrated at our own Calibration Laboratory in the UK, the entire process being traceable to national standards.

## Overview of TAS-System Configurations

Order number	TAS Components	GTQ-Cycler 96	GTQ-Cycler 24	Primus 25	ABI 2720
7008001	TAS PC Software	✓	✓	✓	✓
7015004	TAS Controller	✓	✓	✓	✓
7014001	TAS 8 fixed probe plate	✓*			
7014005	TAS 96 variable probe plate	✓*	✓	✓	✓
7009002	Set of 8 variable probes	✓*			✓
7009007	8x TAS leaded probes (750 mm)		✓	✓	
7017002	TAS Weight	✓			✓
7017003	TAS Bellows				✓
7017004	Ribbon cable	✓	✓	✓	✓
7009009	Reference probe	optional	optional	optional	optional
7010001	1 probe recalibration	optional	optional	optional	optional
7010002	Set of 8 recalibration probes	optional	optional	optional	optional

✓ TAS component is needed for validation of the device mentioned in the column.

\* Can be checked using either the fixed or variable probe plate/probes.

Note: The reference probe is compatible with the variable plate only.

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