

Q-TAS Temperature Validation System

Description

The Q-TAS system is a powerful temperature validation system for thermal cyclers. It includes a control module with an integrated real-time display, probe plates for fixed or variable probes, and powerful PC software.

Q-TAS reliably analyzes data and automatically generates reports. For maximum flexibility and mobility, the system features eight variable probes.

Specifications

- Digital measuring module with integrated real-time display:
 - Can be operated independently (with battery) via display or
 - via PC (USB port) with detailed measurement report
- Sensor plate with fixed or variable temperature sensors:

In addition to the standard fixed probe plate, the TAS system is also available with a variable probe plate. This uses individually interchangeable temperature probes that can be placed in any of the 96 well positions. Combined with wired probes, the variable probe plate offers additional flexibility and is the ideal solution for testing non-standardized thermal cyclers.
- Variable sensors can be individually installed at any position in the thermoblock.

Each temperature sensor has its own automatic sensor position detection system, allowing the application of specific calibration data for each sensor, and an indication of when the calibration interval has been exceeded.
- PC software for conducting measurements and evaluating results
- The TAS system measures and analyzes the thermal cycler's temperature performance in less than 10 minutes, allows for visual comparison from test to test, and enables performance tracking over the entire lifetime of the thermal cycler.



Q-TAS in shockproof case



Q-TAS system

TAS Software

- Real-time graph with zoomable axis:

Detailed testing of accuracy, uniformity, and rate of increase in each protocol phase.
- Either as a line chart or as a graphical representation, real-time measurement curves can be overlaid with previously saved data and analyzed.
- Automatic measurement report with information on temperature accuracy, uniformity, heating and cooling rates, and temperature excursions.
- Measurement report available as a PDF or printout.

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Technical Data

Dimensions (W x D x H)	125 x 90 x 40 mm
Weight	350 g
Measurement range	0°C to 100°C
Number of temperature probes	8, 16, 24, 48, 96 (depends on model)
Detection of sensor positions	automatic
Response time of the temperature sensor	< 0.2 seconds
Probe temperature	Specific calibration data for each probe
Temperature accuracy	± 0.1°C @ 95 °C, QTAS system PC controled ± 0.2°C @ 25 °C, QTAS system Stand-alone operation ± 0.1°C @ 95 °C, after download of data on PC.
Calibration interval	12 months
Certification	CE
Operating system	Windows 2000, XP, 7, 10