TECHNE

# QUANTICA®

## Real-time nucleic acid detection system


*real* multiplex capability…

*real* chemistry versatility…

The *real* journey begins…

Barloworld Scientific

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## Real-time nucleic acid detection system


### Quantica® Features:

- Solid state white light source and photon counting photomultiplier tube (PMT) detector giving an impressive excitation range of 470nm to 650nm and a detection range of 500nm to 710nm.
- Multiplex - multiple wavelengths are detectable per sample using up to 4 paired excitation and emission filters housed in individual cartridge systems.
- Wide dynamic range of at least 9 orders of magnitude from starting copy number and high sensitivity detecting down to 1nM Fluorescein and single copy templates.

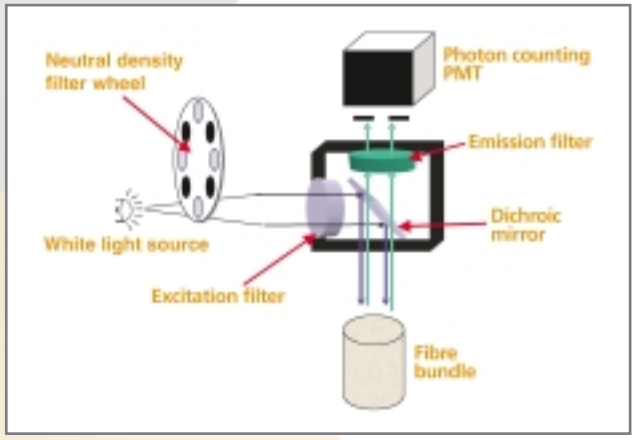
### The Heated Lid:

- A fully flexible optical heated lid system designed to prevent loss of sample and condensation. Flexible temperature control allows further method optimization where different heated lid temperatures would be advantageous during different stages of a program run.

### The Thermal System:

- 96-well low profile microplate format with heat sealed optical film
- Temperature controlled heated lid between 10°C above ambient and 110°C
- Ramp rates up to 2.6°C/sec
- Temperature range 4°C – 99°C
- Robot friendly CD-type block loading mechanism
- Block uniformity of better than ±0.25°C

### Optical Path:




**Quantica® – the *real*-time nucleic acid detection system from Techne has been designed with the advantage of having an open architecture and chemistry format that allows the end user full flexibility of the methods and research they wish to pursue.**

**Quantica® provides at least comparable sensitivity and reproducibility with greater flexibility than many competitive instruments currently on the market whilst using a standard 96 well format.**

# Quansoft

Accompanying Quantica® is our unique and fully flexible, intuitive wizard based application software Quansoft.

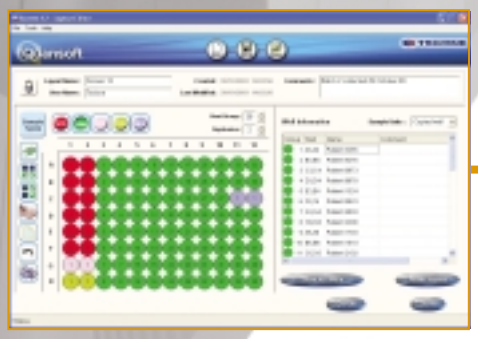

## Quansoft Home Page

By employing a series of user friendly windows Quansoft enables any real-time experiment to be created with ease.



## Experiment Editor

Using combinations of plate layout, program and analysis parameters this unique Quansoft feature allows the user even easier management of experiment protocols.

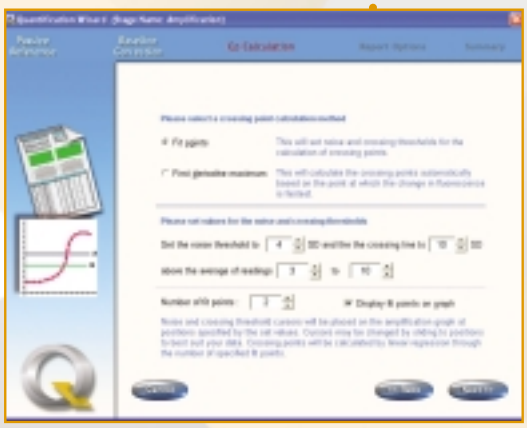


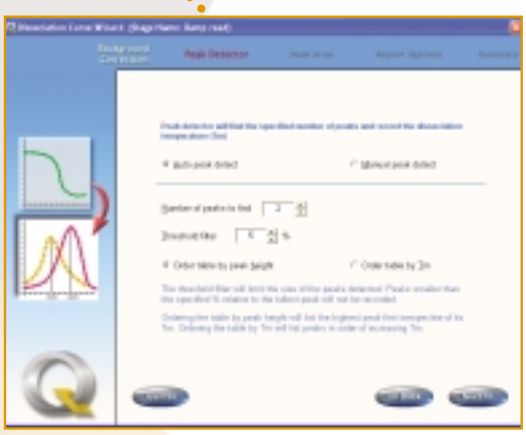
## Plate Layout Editor

Within a matter of seconds a 96 well microplate can be left blank or assigned with unknowns, controls, standards, user defined samples or test samples. All are colour coded for ease of identification.

## Program Editor

Individual cycles and steps or a ramp read are added quickly to build up and display the thermal program and read points.





## Analysis Wizards

Select the analysis wizard of your choice to take you quickly through the setup of the analysis type and its associated parameters for your specific experiment, either pre or post run.

**Choose from:**

- None
- Baseline corrected
- Quantification
- Dissociation curves
- Plus minus scoring
- Allelic discrimination
- Multi-read

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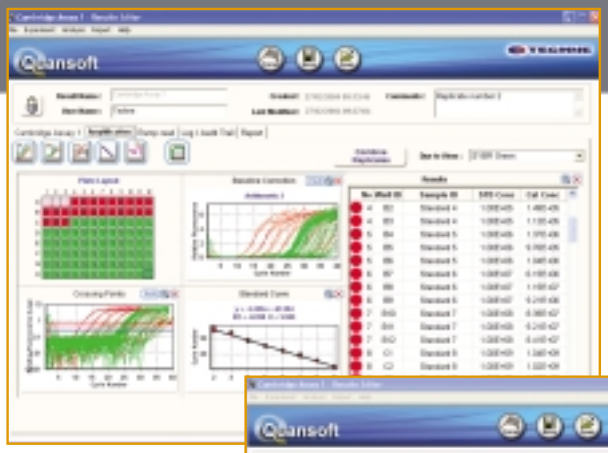
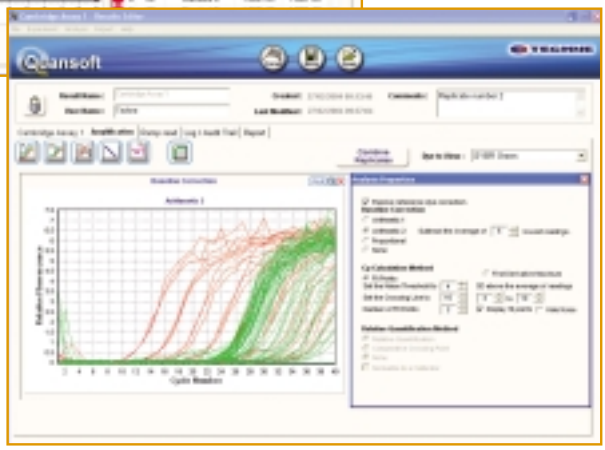
## Real-time nucleic acid detection system

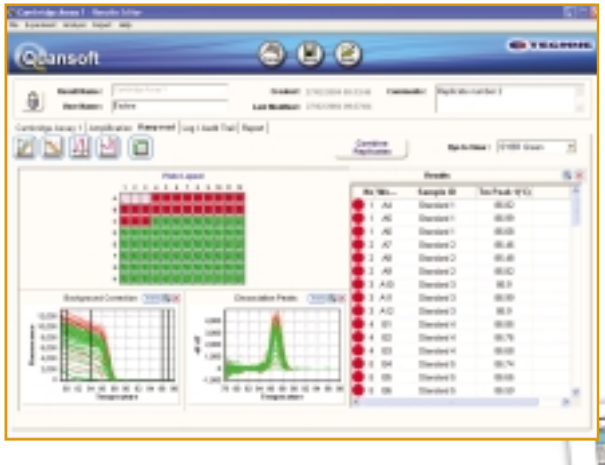


### Results Editor

View and easily modify the results parameters of your experiment post run using Quansoft's multiple document interface (MDI).

Export results tables, visually customised graphs or even your raw fluorescence data to most commonly used software packages.





### Quantica Reports

Comprehensive, completely user customisable report format can be selected for all the available analysis types.

## Quantica® Technical Specifications*

### Thermal Cycler

| | |
|---|---|
| Block format | 96 x 0.2ml well |
| Thermal cycler block specification | 8 x Peltier block employing quad circuit technology to enhance performance |
| Thermal cycler block | Uniformity at 50ºC: better than ±0.25ºC |
| Thermal cycler max' ramp rate | 2.6ºC/sec |
| Thermal cycler temperature range | 4ºC – 99ºC |
| Sample volume | 15 – 50µl |
| Heated lid | Adjustable between 10ºC above ambient to 110ºC |
| Connectability | Connect up to 4 Quantica to one computer[1] |
| Plate format | Low profile 96 well plate |

### Optical Detection System

| | |
|---|---|
| Excitation source | Solid state white light source |
| Detector | Photon counting photomultiplier tube |
| Multiplex dye detection | Up to 4 dyes per reaction tube |
| User selected filters | Maximum of 4 paired excitation/emission filter cartridge systems suitable with currently used dyes |
| Fluorescence excitation range | 470nm – 650nm |
| Fluorescence detection range | 500nm – 710nm |
| Dynamic range | At least 9 orders of magnitude from starting copy number |
| Sensitivity[#] | 1nM fluorescein in a 20µl sample. Single initial template copy detection. |

### Dimensions

| | |
|---|---|
| Weight | 25kg |
| Size and footprint | 41cm x 51cm x 53cm (WxHxD) |
| Input power | 750W |
| Power supply | 100/115/230v 50/60Hz |

## Ordering information

### Description

[1]Quantica real-time nucleic acid detection system - please contact your local Techne representative for details or visit **www.techne.com**

* Specification correct at going to print.
[1] Minimum computer specifications apply.
Computer available as an option in the UK only.
[#]Assay dependent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