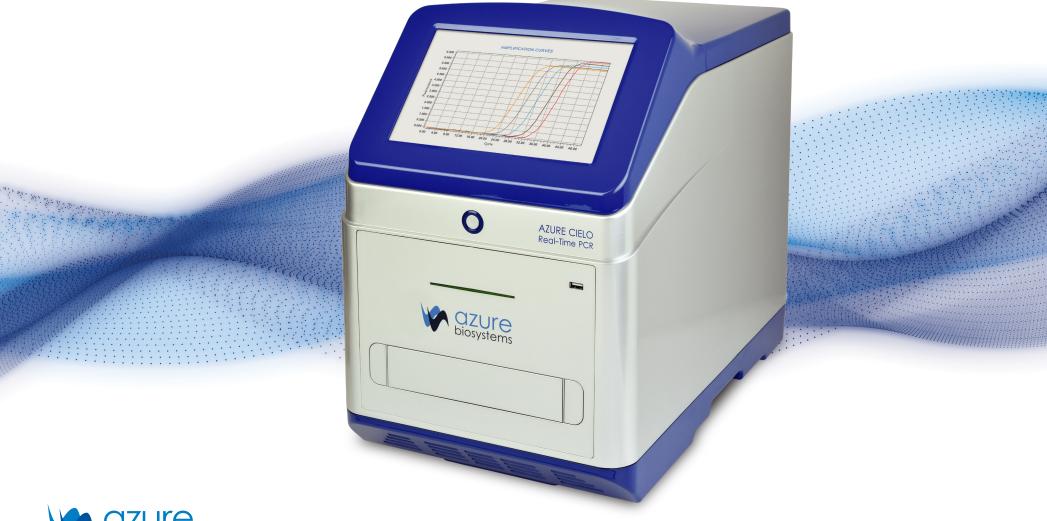


# Azure Cielo<sup>™</sup>

### Real-Time PCR Systems









## Harness the power of qPCR



The Azure Cielo Real-Time PCR system brings you the accuracy and sensitivity you need for your research, with intuitive touch screen software. Designed to fit the needs of your lab, the Cielo 3 and the Cielo 6 allow you the flexibility to select a system that fits both your applications and your budget. Our two-year standard warranty reflects the robustness and reliability of the system, giving you confidence in your results.

The Azure Cielo 3 and Cielo 6 bring you:

- **Flexibility**—Engineered for a wide variety of qPCR applications, with high sensitivity and wide dynamic range
- Intelligent workflow—Our user interface allows simple touch screen assay setup, and multi-user logins to make each run easy and reproducible
- **Reliability**—Our optics and thermal block are designed to deliver the same uniformity and reproducibility after 1000 qPCR experiments, giving you confidence in reliability of the machine
- **Connectivity**—no external PC is required to run the machine. Data can be transferred via Ethernet, LAN, Wi-Fi or USB

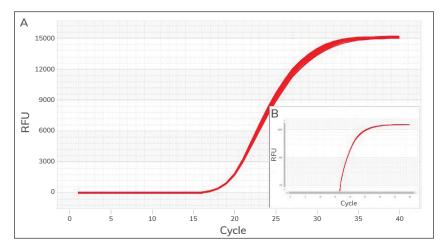


### Performance without compromise



#### TIGHT REPLICATES THROUGH SUPERIOR INTER-WELL UNIFORMITY

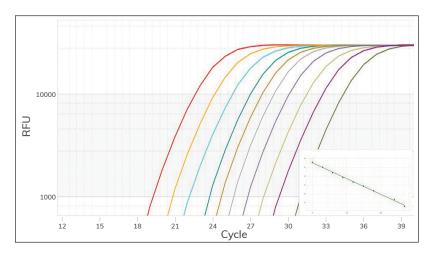
Reliable, reproducing results begin with well to well temperature uniformity. Inter-well thermal uniformity gives you the confidence that each well is behaving identically.



Unparalleled uniformity. Amplification curves for 96 replicates have been shown in Figure A) Linear Plot and Figure, and B) Logarithmic Plot. 96 replicates of  $10^5$ copies of GAPDH template amplified in the presence of GAPDH primers and BioRad<sup>TM</sup> Sso Advanced SYBR Green Mix<sup>®</sup>. Average Cq = 19.1, Coeff of variance (Cv) = 0.002. Logarithmic view.

#### **RELIABLY DETECT 2-FOLD DIFFERENCES**

High thermal uniformity and reproducibility lead to confidently detecting 2-fold differences in gene expression.

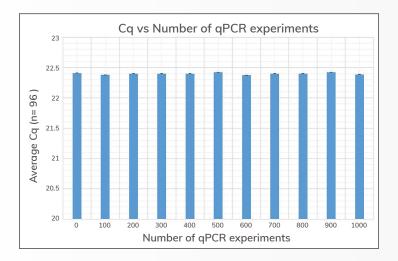


10 point, 2X dilution series of Human reference cDNA (n=3) was tested for Human GAPDH and BioRad SSo Advanced SYBR Green using Azure Cielo. Shown here is the Log Amplification Curve of the 10 samples. In-set Figure shows Standard Curves Plot of the 2X Dilution series , R<sup>2</sup> (Standard Curve Method) =0.998, Efficiency= 99.89%.



#### ROBUST DESIGN FOR THE LIFETIME OF YOUR LAB

Durable and efficient Thermal and Optical System ensures that your data is reproducible even after 1000 qPCR experiments.



After subjecting the Azure Cielo for 100 continuous qPCR experiments, a GAPDH qPCR assay was performed and Amplification values (Cq) were recorded. Average Cq in each assay = 22.4,  $\pm 0.01$ .

#### CHOOSE FROM THE CIELO 3 OR THE CIELO 6 FOR YOUR APPLICATIONS



Dyes/ Probes	Azure Cielo 3	Azure Cielo 6
SYBR™ Green, EvaGreen™, FAM™	~	✓
VIC®, HEX™, JOE™, CAL Fluor® 540, CAL Fluor® Orange 560	~	✓
ROX™, TAMRA™		✓
TEX®615, Quasar®670, CAL Fluor® Red 610		✓
Cy®5, Liz®, Mustang Purple®	✓	✓
Cy®5.5, Quasar®705, FRET probes		✓

Other dyes/probes are also possible and depends on the system configuration.

## Let's get started



The hardest part of your experiment shouldn't be setting up your run. We've developed a guided, step by step approach to help you set up your cycling conditions and dyes, so you can minimize set up time.

- Workflows designed to minimize time needed to setup run
- Receive end-of run notification and data file via email, or simply connect to the machine via Wi-Fi/Ethernet or USB
- Simple-to-use, feature rich 10.2" touchscreen allows you to setup runs with the touch of a finger



EASY TOUCHSCREEN SETUP OF QPCR RUN PROFILE INCLUDING MELT CURVE.



## Azure Cielo Analysis

#### **EXPERIMENTAL TEMPLATES**

Pre-programmed assays allow for easy selection of calibrators, controls and other experiment related specimens.

Template assays available to choose from:

- 1. Quantitative PCR
- 2. Allele Discrimination
- 3. Comparative Quantification
- 4. High-Resolution Melt



Well defined plate layout allows user to quickly identify each well with a single glance.

#### CUSTOMIZED DATA REPORTING

Customized data reporting feature that allows users to only export datasets you want displayed.

- 1. Plate Setup
- 2. Experiment Thermal Profile
- 3. Raw Data Plots

6. Statistics Data

5. Graphical Displays

- 7. Experimental Notes
- 4. Amplification Plots



Specifications		
Part number	AIQ1001	AIQ1002
Product description	96-well Real-Time PCR instrument with 10.2" touchscreen interface, 3 dye channel filters	96-well Real-Time PCR instrument with 10.2" touchscreen interface 6 dye channel filters
Sample capacity (wells)	96	96
Reaction volume	10-150µL	10-150µL
Excitation source	LED	LED
Detection channels	3	6
Multiplexing	Up to 3 targets	Up to 6 targets
Thermal element	Peltier	Peltier
Max. block ramp rate	6°C/sec	6°C/sec
Avg. sample ramp rate	3.7°C/sec	3.7°C/sec
Temperature uniformity	±0.3°C	±0.3°C
Temperature accuracy	±0.1°C	±0.1°C
Dye compatibility	SYBR Green/EvaGreen, FAM, VIC/JOE/HEX/CAL Fluor 540, CAL Fluor Orange 560, Cy5/LIZ/Mustang Purple	SYBR Green/EvaGreen, FAM, VIC/JOE/HEX/CAL Fluor 540, CAL Fluor Orange 560, ROX/TAMRA, TEX615,Quasar 670, CAL Fluor Red 610 Cy5/LIZ/Mustang Purple, Cy5.5/Quasar 705
Custom dye/chemistry	✓	✓
Chemistry capability	Fast/Standard	Fast/Standard
Detection sensitivity	1 сору	1 сору
Sensitivity	Detect differences as small as 2-fold in target quantities in singleplex reactions	Detect differences as small as 2-fold in target quantities in singleplex reactions
Connectivity	USB, Wi-Fi, LAN, Ethernet	USB, Wi-Fi, LAN, Ethernet



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