

# AriaMx

## Real-Time PCR System



SPEED



AGILITY



PRECISION



### Total Confidence qPCR

The AriaMx Real-Time PCR System is a fully integrated quantitative PCR amplification, detection, and data analysis system. Now with [innovative modular optics](#) which can be [changed out in one easy step](#), the instrument provides the flexibility to scale up over time, as needed.

The latest design combines a [state-of-the-art thermal cycler](#), an advanced optical system with LED excitation source, and data analysis software. Continuing the tradition of intuitive software, the instrument now has a touchscreen so plates and analytics can be started with the touch of a finger.

With [enhanced performance](#), the software provides results capturing RDML information required for publishing under the miQE guidelines. Simultaneously, the software is equipped to [export images and raw data in multiple formats](#), allowing results to be viewed in common programs.

### Specifications Table

Feature	Description
<b>Excitation Source</b>	8 dye specific LEDs per optical module
<b>Detection Sources</b>	8 photodiodes
<b>Optical Cartridges</b>	SYBR/FAM HEX ROX CY3 CY5 ATTO425 6 slots, swappable optical modules
<b>Dye Selection</b>	Excitation and Emission
<b>Reaction Volume</b>	10µL to 30µL
<b>Chemistries Supported</b>	SYBR, Probe, HRM
<b>Thermal System</b>	Six Peltiers made from two ceramic plates with semi-conductor elements, 96-well
<b>Thermal System Temperature Range</b>	25.0 – 99.9°C Heating: 6.0°C/sec Cooling: 3.0°C/sec (Median), 2.5°C/sec (Average) Accuracy: ± 0.2°C or better at typical annealing, amplification, and denaturation temperatures
<b>Dynamic Range</b>	9
<b>Experiment Types</b>	Quantitative PCR with dye, Quantitative PCR with probe, Allele Discrimination with HRM, Allele Discrimination with probe, Comparative Quantitation, User Defined
<b>Uniformity</b>	± 0.4°C
<b>Data Acquisition Time</b>	<3 seconds for all
<b>Cq Uniformity</b>	Cq St Dev <0.20 at fast cycling (5s 95°C/10s 60°C)
<b>Electrical Power (input)</b>	100 – 240VAC, 50/60Hz, 1100VA
<b>Operating Environment</b>	20 – 30°C, 20 – 80% non-condensing humidity, 7500 feet, max altitude
<b>Weight</b>	50 lbs. (23 kg)
<b>Dimensions</b>	19.7" W x 18.1" D x 16.5" H (50cm x 46cm x 42cm)
<b>Sample Containers</b>	96-well plates, strip tubes; 0.2mL tubes
<b>Warranty</b>	<ul style="list-style-type: none"> <li>• 1-year warranty is standard with the instrument</li> <li>• 5-year warranty and service packages available</li> </ul>
<b>Onboard Analytics</b>	<ul style="list-style-type: none"> <li>• Thermal, physical, interactive (sensors) tests</li> <li>• Extended: 125 performance points tested in 30 minutes</li> <li>• Start-up: 59 performance points tested in ~1 minute</li> <li>• Optional bypass of both features</li> </ul>
<b>Services (upon request)</b>	<ul style="list-style-type: none"> <li>• Installation and familiarization</li> <li>• Standard and Enhanced Preventative Maintenance</li> <li>• Additional year warranty (+1 increments, up to 5 years coverage)</li> <li>• Return-to-Agilent Instrument Exchange Program</li> <li>• Thermal block verification</li> </ul>
<b>Operating System</b>	<ul style="list-style-type: none"> <li>• Windows 7 and 10</li> </ul>
<b>MS Office Compatibility</b>	<ul style="list-style-type: none"> <li>• Microsoft 2010 and 2013 compatible</li> </ul>
<b>Run Modes</b>	<ul style="list-style-type: none"> <li>• Stand alone</li> <li>• PC connected</li> <li>• LAN connected to PC (more than 20 instruments can be connected and monitored remotely)</li> <li>• USB connected, external devices</li> </ul>

For more firmware and software features, see next page.



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## Specifications Table (con't)

Feature	Description
<b>Software</b>	Free software including LIMS connectivity
<b>Optical Module Calibration and Cleaning</b>	<ul style="list-style-type: none"> <li>All channels can be tested and calibrated</li> <li>All attributes of optical channels are calibrated at the factory – LED light output, light path, mirror, and photodiode</li> <li>Optical modules can be cleaned in lab without Agilent technician or sending back to factory</li> </ul>
<b>Selected Applications</b>	<ul style="list-style-type: none"> <li>Quantitative and qualitative gene expression analysis</li> <li>miRNA analysis</li> <li>Genetic mapping</li> <li>Genetic fingerprinting</li> <li>NGS library quantification</li> <li>2-6 channel multiplex ability</li> <li>HRM analysis (including genotyping, mutational analysis, and class IV SNP detection)</li> <li>Pathogen quantification</li> </ul>

## Ordering Information

Category	Part #	Description	Quantity
<b>Base Instrumentation</b>	G8830A	AriaMx Real-Time PCR System	1
<b>Optical Cartridges</b> (*Use part numbers to upgrade post instrument purchase)	Option 101 (G8830-67001*)	SYBR/FAM Optical Cartridge	1/pack
	Option 102 (G8830-67002*)	ROX Optical Cartridge	1/pack
	Option 103 (G8830-67003*)	HEX Optical Cartridge	1/pack
	Option 104 (G8830-67004*)	CY3 Optical Cartridge	1/pack
	Option 105 (G8830-67005*)	CY5 Optical Cartridge	1/pack
	Option 106 (G8830-67006*)	ATTO425 Optical Cartridge	1/pack
<b>Software Upgrade and PC</b> (with instrument)	Option 300	Electronic Tracking of HRM software	1
	Option 400	HRM analysis software upgrade	1
	Option 650	AriaMx PC Kit	1
<b>AriaMx Software Upgrade</b> (post instrument purchase)	G5380AA	Electronic Tracking of the HRM software	1
	G5381AA	HRM analysis software upgrade only	1
<b>Plastics</b>	401490	AriaMx 96-well plates, skirted and low profile	1 x 25/pack
	401491	AriaMx 96-well plates, skirted and rigid	1 x 25/pack
	401494	AriaMx 96-well plates, non skirted low profile	1 x 25/pack
	401492	AriaMx adhesive plate seals	1 x 25 plates
	401493	AriaMx low profile strip tubes for PCR and qPCR applications, without caps	8/strip x 120/box
	401425	AriaMx Strip caps for PCR and qPCR applications	8/strip x 120/box
	401427	AriaMx Optical Strip Caps	Box of 60
<b>Reagents</b>	PROBE 600880	Brilliant III Ultra-Fast qPCR Master Mix	400 rxns
	SYBR 600882	Brilliant III SYBR Ultra-Fast qPCR Master Mix	400 rxns
	5190-7708	AriaMx SYBR Qualification Plate	1 plate/pack
	MULTIPLEX 600553	Brilliant Multiplex qPCR Master Mix	200 rxns
	HRM 5190-7827	Brilliant HRM Ultra-Fast Loci Master Mix	200 rxns
	5190-7702	AriaMx HRM Calibration Kit	1 x 96-well plate
<b>Starter Packs</b> (Includes cDNA synthesis kits* and recommended plastics)	600906*	AriaMx SYBR Green Starter Pack	1
	600907*	AriaMx qRT-PCR Starter Pack	1
	5190-9370	Brilliant HRM Ultra fast Starter Pack	1

## Useful Tools and Web Links

**qPCR Decision Tree**

Determine which qPCR reagents or enzymes best serve your needs by visiting [www.agilent.com/genomics/qpcrdecisiontree](http://www.agilent.com/genomics/qpcrdecisiontree)

**Software Updates**

Ensure your software is the most current version by visiting [www.agilent.com/genomics/ariamxsoftware](http://www.agilent.com/genomics/ariamxsoftware)

For a virtual demo, visit [www.agilent.com/genomics/ariamxvideos](http://www.agilent.com/genomics/ariamxvideos)  
For a live demo, call your Agilent sales representative.

**FOR MORE INFORMATION**

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For Americas, call **800.227.9770** or for other regions, consult [www.agilent.com/genomics/contactus](http://www.agilent.com/genomics/contactus)

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