

AriaMx Real-Time PCR System

DATA SHEET



Specifications Table



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.

For more firmware and software features, see next page.

Feature	Description
Excitation Source	8 dye specific LEDs per optical module
Detection Sources	8 photodiodes
Optical Cartridges	SYBR/FAM HEX ROX CY3 CY5 ATTO425 6 slots, swappable optical modules (additional modules will be made available in 2016)
Dye Selection	Excitation and emission
Reaction Volume	10µL to 30µL
Chemistries Supported	SYBR, Probe, HRM
Thermal System	Six Peltiers made from two ceramic plates with semi-conductor elements, 96 well
Thermal System Temperature Range	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
Dynamic Range	9
Experiment Types	Quantitative PCR with dye, Quantitative PCR with probe, Allele Discrimination with HRM, Allele Discrimination with probe, Comparative Quantitation, User Defined
Uniformity	± 0.4°C
Data Acquisition Time	<3 seconds for all
Cq Uniformity	Cq St Dev <0.20 at fast cycling (5s 95°C/10s 60°C)
Electrical Power (input)	100 – 240VAC, 50/60Hz, 1100VA
Operating Environment	20 – 30°C, 20 – 80% non-condensing humidity, 7500 feet, max altitude
Weight	50 lbs. (23 kg)
Dimensions	19.7" W x 18.1" D x 16.5" H (50cm x 46cm x 42cm)
Sample Containers	96 well plates, strip tubes; 0.2mL tubes
Warranty	<ul style="list-style-type: none"> • 2 year warranty is standard with the instrument • 5 year warranty and service packages available
Onboard Analytics	<ul style="list-style-type: none"> • Thermal, physical, interactive (sensors) tests • Extended: 125 performance points tested in 30 minutes • Start-up: 59 performance points tested in ~1 minute • Optional bypass of both features
Services (upon request)	<ul style="list-style-type: none"> • Installation and familiarization • Standard and Enhanced Preventative Maintenance • Additional year warranty (+1 increments, up to 5 years coverage) • Return-to-Agilent Instrument Exchange Program • Thermal block verification
Operating System	• Windows 7
MS Office Compatibility	• Microsoft 2010 and 2013 compatible
Run Modes	<ul style="list-style-type: none"> • Stand alone • PC connected • LAN connected to PC (more than 20 instruments can be connected and monitored remotely) • USB connected, external devices



Agilent Technologies

Specifications Table (con't)

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

Ordering Information

Category	Part #	Description	Quantity	
Instrumentation	G8830A	AriaMx Real-Time PCR System (Base Instrument)	1	
	Option 010	Base Instrument (no filters)	1	
	Option 101	SYBR/FAM Optical Cartridge	1/pack	
	Option 102	ROX Optical Cartridge	1/pack	
	Option 103	HEX Optical Cartridge	1/pack	
	Option 104	CY3 Optical Cartridge	1/pack	
	Option 105	CY5 Optical Cartridge	1/pack	
	Option 106	ATTO425 Optical Cartridge	1/pack	
	Option 650	AriaMx Software on HP Laptop	1	
Optical Cartridges (sold without instrument)	G8830-67001	SYBR/FAM Optical Cartridge	1/pack	
	G8830-67002	ROX Optical Cartridge	1/pack	
	G8830-67003	HEX Optical Cartridge	1/pack	
	G8830-67004	CY3 Optical Cartridge	1/pack	
	G8830-67005	CY5 Optical Cartridge	1/pack	
	G8830-67006	ATTO425 Optical Cartridge	1/pack	
Plastics	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	
	401493	AriaMx strip tubes	8 x 120/pack	
	401494	AriaMx 96 well optical plates, non skirted, low profile	1 x 25/pack	
	401495	Strip caps	8 x 120/pack	
Reagents	SYBR	600880	Brilliant III SYBR Ultra-Fast qPCR Master Mix	400 rxns
		600883	Brilliant III SYBR Ultra-Fast qPCR Master Mix	10 pack (10 x 400 rxns)
		5190-7708	AriaMx SYBR Qualification Plate	1 plate/pack
	MULTI-PLEX	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

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

Software Updates

Ensure your software is the most current version by visiting www.agilent.com/genomics/ariamxsoftware



FOR MORE INFORMATION

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For Americas, call **800.227.9770** or for other regions, consult www.agilent.com/genomics/contactus

For a virtual demo, visit www.agilent.com/genomics/ariamxvideos
For a live demo, call your Agilent sales representative.

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