

**Thank you for purchasing an Agilent instrument solution.** To get you started and to assure a successful and timely installation, please refer to this specification or set of requirements.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an information guide AND checklist prepared for you that outlines the supplies, consumables, space and utility requirements for your equipment for your site.

For additional information about our solutions, please visit our web site <u>http://www.chem.agilent.com/en-US/Pages/HomePage.aspx</u>

### **Customer Responsibilities**

- Make sure your site meets the following prior to the installation date using the checklist below. For details, see specific sections within this document, including:
  - □ Necessary laboratory or bench space is available.
  - **D** Environmental conditions for the lab.
  - Dever requirements related to the product (e.g. number & location of electrical outlets)
  - **D** Required operating supplies necessary for the product and installation.
  - □ If Agilent is delivering installation and familiarization services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information.

### **Important Customer Information**

- If you have questions or problems in providing anything described as Customer Responsibilities above, please contact your local Agilent or partner support/service organization for assistance prior to delivery. In addition, Agilent and/or its partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.
- Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to rearrange any services that have been purchased.
- Other optional services such as additional training, compliance services (HW and SW installation qualification (IQ) or operational qualification (OQ)) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system, but should be contracted separately.





# **Instrument Dimensions and Weight**

Instrument Description	Weight	Height	Depth	Width
G8830A QPCR Instrument	23 kg	50 cm	46 cm	42 cm
	(50 lbs.)	(19.7")*	(18.1")	(16.5")

- □ \*Height 23.5" with door open. Verify sufficient clearance (above instrument) to fully open the instrument door.
- □ The G8830 AriaMx instrument needs at least 10 cm (4") of space around the instrument base for air circulation and electrical/network connections.
- □ Additional bench space may be required for external PC (direct connection), keyboard, mouse and for the accessories to allow for proper reagent preparation.



# **Environmental Conditions**

Operating your instrument within the recommended temperature ranges and insures optimum instrument performance and lifetime.

Instrument Description	Operating Temp	Humidity (Operating)	Altitude (Operating)
G8830A QPCR Instrument	20-30°C	20–80% non-condensing	2000m
	(68-86°F)	humidity (operating)	(6562 ft.)

### Special Notes:

- 1. Performance can be affected by sources of heat & cold e.g. direct sunlight, heating/cooling from air conditioning outlets, or drafts.
- 2. The instrument should be installed in a location where it will not be exposed to direct sunlight or high intensity light sources (table lamps, spotlights, etc.)
- 3. The site's ambient temperature conditions must be stable for optimum performance.
- 4. Do not store, ship or use the instrument under conditions where temperature fluctuations could cause condensation within the instrument. Condensation may cause incorrect QPCR experiment results and may damage the electronics.
- 5. If the instrument was shipped in cold weather, leave it in its box and allow it to warm up slowly to room temperature to avoid condensation.
- 6. The instrument must not be installed on a vibrating surface or near to other vibrating instruments (vortexer, centrifuge, machine shop equipment, vacuum pumps...etc.)

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- 7. Installation Category: II Pollution Degree: 2 For Indoor Use Only. No dust or particles in the air.
- 8. No air flow should be directed on the instrument (e.g. thermal cyclers, fans, air conditioning)



## **Instrument Power Consumption**

Instrument Description	AC Line Voltage (V)	Line Frequency(Hz)	Max. power consumption (VA)	Maximum Power Consumption (W)
G8830A QPCR Instrument	$100-240V \pm 10\%$	50/60 Hz ± 5%	1100 VA	~600 (peak)

#### Special Notes:

Power requirements: 2 separate outlets on independent circuits are recommended for the instrument and the external computer.



# **Computer Hardware & Operating System Specifications**

Specification Description	Minimum
Operating system type(s), versions	Windows 7 (32-bit and 64-bit versions)
Processor type & speed	1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor
Memory	1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
Internal Storage/devices/media	16 GB available hard disk space (32-bit) or 20 GB (64-bit)
Display resolution	1280 x 1024 DirectX 9 graphics device with WDDM 1.0 or higher driver
Ports	1-2 USB ports USB 2.0 or higher (recommended)
Other	TBD

#### Special Notes:

- 1. All PC hardware needs to be listed respectively in the Windows Hardware Compatibility List (<u>http://www.microsoft.com/whdc/hcl/default.mspx</u>).
- 2. The voltage setting of the computer system and the power cables have to be correct.
- 3. Before installing the AriaMx QPCR software, make sure you have the appropriate rights (licensing/activation codes) for installation. You may need to have an account with administrative rights to successfully install all needed components.
- 4. For installations of the AriaMx ET software (21 CFR version of the software), customer should also have an existing login account/access to Agilent's Electronic Software and License Delivery SubscribeNet for licensing information/activation codes.

5. The computer hardware & operating systems specifications listed below refer to the AriaMx QPCR software (Rev 1.0) and may change with future revisions. For current information, refer to http://www.genomics.agilent.com/GenericB.aspx?pagetype=Custom&subpagetype=Custom&pagei d=23 54.



## **Required Operating Supplies & Equipment by Customer**

The following items (which are not included in the delivery) are required to correctly install & operate the G8830 AriaMx QPCR system, depending on configuration identified below:

- Standalone configuration (instrument not connected to network connected, no external PC for direct or networked connection):
  - □ \*96 Well PCR Plate-0.2ml Skirted low profile (Agilent P/N 401490, Thermo Fisher P/N AB-0800) or approved alternate (Agilent P/N 401491, ABgene 96 Well PCR Plate P/N AB-2800) or equivalent. For Background Calibration.
  - □ \*Optical Caps 8x Strip (Agilent P/N 401425, Thermo Fisher ABgene P/N AB-0866) or equivalent. For Background Calibration.
  - **D** Pipettes and Pipette tips to dispense TE buffer solution or DI water.
  - □ Centrifuge (tabletop model, low speed) for spinning down 96 well PCR plates.
  - □ Power Strip (w/ surge protection recommended) or Uninterruptible Power Supply (UPS) with battery backup (Optional).
  - □ Powder free gloves.

### **Special Notes:**

1. For information on Agilent consumables, accessories and laboratory operating supplies, please visit http://www.genomics.agilent.com/en/home.jsp

### • Networked Instrument Configuration or Direct Connection to PC:

- □ All of above items plus:
- □ Laptop Computer or Desktop Workstation (Windows 7 with MS Office 2010 or Office 2013 installed). For AriaMx QPCR Software installation.
- □ Ethernet based network connection (10/100 Mbps Base T). Wireless LAN not supported.
- □ Ethernet cable (CAT-5 or CAT-6, RJ-45 connectors) compatible with customer network. Length 4' 6' or longer (dependent on bench location)
- \*Note: The installation engineer may also provide plasticware for the initial Background Calibration. However it is recommended that the customer have these recommended plates/caps so they can perform future Background Calibration. This is required when new Cartridge Modules are installed, when Cartridges are moved to different slots, or when instrument location changes to a different site location.

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## **Other Important Customer Web Links**

- □ How to get information on your product: <u>https://www.genomics.agilent.com/zh/qPCR-Instruments-Software/AriaMx-Realtime-PCR-System/?cid=AG-PT-169&tabId=AG-PR-1315</u>
- □ Literature Library <u>http://www.agilent.com/chem/library</u>
- □ Need to know more? <u>www.agilent.com/chem/education</u>
- □ Need technical support, FAQs? <u>https://www.genomics.agilent.com/article.jsp?pageId=3286</u>, <u>www.agilent.com/chem/techsupp</u>
- □ Need supplies? <u>https://www.genomics.agilent.com/en/Probe-Master-Mixes/Brilliant-III-Probe-MM/?cid=AG-PT-165&tabId=AG-PR-1025</u>, www.agilent.com/chem/supplies