

Agilent CrossLab Start Up Services

Agilent 2100 Bioanalyzer System G2939BA Site Preparation Checklist

Thank you for purchasing an instrument from **Agilent Technologies**. CrossLab Start Up is focused on helping customers shorten the time it takes to start realizing the full value of their instrument investment.

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, space, and utility requirements for the system set up in your lab.

Introduction

Customer Information

- If you have questions or problems in providing anything described as part of Customer Responsibilities below, 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 re-schedule any services that have been purchased.
- Other optional services such as additional training, 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.
- Please refer to the other peripheral products (ie, IKA Vortexer etc.) for site preparation requirements.

Customer Responsibilities

Ensure that your site meets the following specifications before the installation date. For details, see specific sections within this checklist, including:

- The necessary laboratory or bench space is available.
- The required **environmental conditions for the lab**.
- The **power requirements** related to the product (e.g., **number & location** of electrical outlets).
- The **required operating supplies** necessary for the product and installation.
- The computing environment and the necessary space is made available.
- The number & location of electrical outlets for your computer systems and peripherals are planned.
- That your site meets the software, hardware, and networking specifications below.
- Locate your sales order information, and licenses.
- The necessary software media are available.
- That a suitable backup solution is identified for your software.
- Please make sure you have at least one 2100 Bioanalyzer assay kit available for the Introduction Service.

- Please transport the delivered boxes to the room where the instrument should be installed upfront of your Installation Service.
- While Agilent is delivering **Installation and Introduction** services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information.
- Please consult the **Special Requirements and Other Considerations** section below for other product-specific information

For the 2100 Bioanalyzer system G2939BA, installation of non-Agilent PC and software is not part of the "Installation Service".

Agilent is not responsible for installation of non-bundled PC and in this case the installation is a self-service. There is an optional software installation service available. For more details, please contact your local Agilent sales representative. Note that the Security Pack G2949CA software add-on is not supported with third party PCs.

The customer's responsibilities in case of non-bundled PCs comprises:

- Unpacking and setting up the PC.
- Install the 2100 Expert software B.02.12 or higher.
- Installation of the USB/Serial driver if instrument is connected to the PC via USB port.
- Please refer to the installation advisory that is send to you along with the system for further details on the installation of the PC and software.

Important Customer Web Links

- For additional information about our solutions, please visit our web site at <https://www.agilent.com/en/product/automated-electrophoresis/bioanalyzer-systems>
- Subscribe to the 2100 Bioanalyzer eBulletin Newsletter to stay informed <https://www.agilent.com/en/promotions/e-bulletin-subscription>
- If you require general support for your Microsoft operating system <http://support.microsoft.com/>
- The **Agilent Community** is an excellent place to get answers, collaborate with others about applications and Agilent products, and find in-depth documents and videos relevant to Agilent technologies. Visit <https://community.agilent.com/welcome>
- Videos about specific preparation requirements for your instrument can be found by searching the **Agilent YouTube** channel at <https://www.youtube.com/@agilent/search?query=bioanalyzer>

Site Preparation

Dimensions and Weight

Identify the laboratory bench space before your system arrives based on the table below. Pay special attention to the total height and total weight requirements for all system components you have ordered and avoid bench space with overhanging shelves.

Special notes

The following table provides dimensions and weight requirements.

| Instrument Description | Weight | | Height | | Depth | | Width | |
|-----------------------------|--------|------|--------|------|-------|------|-------|-----|
| | Kg | lbs. | cm | in | cm | in | cm | in |
| 2100 Bioanalyzer instrument | 10 | 22 | 29 | 11.4 | 41.2 | 16.2 | 16.2 | 6.4 |

- *Additional bench space is required for laptop and IKA vortexer.*

Environmental Conditions

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

Special notes

- Performance can be affected by sources of heat & cold, e.g., direct sunlight, heating/cooling from air conditioning outlets, drafts and/or vibrations.
- The bench or supporting surface must be vibration free.
- The site's ambient temperature conditions must be stable for optimum performance.
- The instrument requires a space of at least 2.5 cm (1 in) on both sides and 8 cm (3.1 in) at the back for the circulation of air and room for electrical connections.
- The short circuit test checks for instrument leak currents. The limits of this test specify an ambient temperature of 25°C and relative humidity less than or equal to 50%. Higher temperatures or relative humidity could result in a failed short circuit test.

| Instrument Description | Operating Temperature Range °C (F) | Operating Humidity Range % |
|-----------------------------|---------------------------------------|--|
| 2100 Bioanalyzer instrument | 15 - 27°C (59 - 80°F) | < 70%, non-condensing at 15 - 27°C (59 - 80°F) |

Power Consumption

Special notes

- If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
- Account for an electrical outlet for the instrument and the PC. Also be aware that the supplied IKA vortexer requires an additional outlet.
- The 2100 Bioanalyzer instrument has an automatic line sensing, wide-ranging power supply.

| Instrument Description | Line Voltage and Frequency V, Hz | Maximum Power Consumption VA | Maximum Power Consumption W |
|-----------------------------|--|---------------------------------|--------------------------------|
| 2100 Bioanalyzer instrument | 100 - 240 V \pm 10% 50 - 60 Hz \pm 5% | 60 | 30 |

Required Operating Supplies by Customer for Installation

Special notes

- For information on Agilent consumables, accessories, and laboratory operating supplies, please visit <https://www.agilent.com/en/product/automated-electrophoresis/bioanalyzer-systems>

| Item Description (including Dimensions etc.) | Vendor's Part Number (if applicable) | Recommended Quantity |
|--|---|--|
| Pipettes and appropriate tips (1000 μ L, 100 μ L, 10 μ L) | N/A | 1 set with tips (non filter tips for RNA assays) |
| Micro centrifuge capable of delivering 2500 x g (13000 x g for RNA assays) | N/A | 1 |
| Adjustable heating block for 0.5 mL Eppendorf vials, capable of delivering 100°C or water bath | N/A | 1 |
| Powder-free gloves | N/A | 1 box |
| De-ionized water | N/A | 10 mL |
| Eppendorf vials (1.5 and 0.5 mL) | N/A | depends on experiment setup |
| Beta-mercaptoethanol (β -ME) or dithiothreitol (DTT) for Protein assays only | N/A | depends on experiment setup |
| RNase decontamination solution (e.g., RNase Zap™) for RNA assays only | N/A | 1 bottle |

| Item Description (including Dimensions etc.) | Vendor's Part Number (if applicable) | Recommended Quantity |
|--|---|-------------------------|
| 2100 Bioanalyzer reagents and chips used for the Introduction Service (not included in the G2939BA purchase) | Assay dependent | 1 kit |

Software Specifications for Workstations, Clients, and Servers

Special notes

- 2100 Expert software version B.02.12 or higher is mandatory for this product.

| Specification Description | Minimum | Recommended (if applicable) | Comments (if applicable) |
|---|---|-----------------------------------|--|
| Operating system type(s), versions | Windows 10 or Windows 11 | 64-bit version | n/a |
| O/S .NET & other add-ons | Microsoft.NET Framework 3.5 | n/a | Mandatory |
| Install Language settings/compatibility | English (US) | English (US) | The Install Language of the Windows Operation System must be English (US). |
| Regional settings/compatibility | English (US) | English (US) | Mandatory |
| Specific drivers | n/a | FTDI USB chipset drivers CDM21228 | Only if USB/serial adapter cable (5188-8031) is being used. |
| Printers | Default printer driver installed and set. | n/a | This can be a virtual printer like PDF or XPS |

Computer Hardware Specifications for Workstations, Clients, and Servers Special Requirements and Other Considerations

Special Notes

- Applicable specifications for third party PC's (the Security Pack addon G2949CA is not supported with a third-party PC. It must be combined with the Agilent bundle laptop G2953CA).
- High resolution display settings can cause artifacts when operating the 2100 Expert software.
- Windows display zoom can cause artifacts and should be set to 100 %.

| Specification Description | Minimum | Recommended (if applicable) | Comments (if applicable) |
|--------------------------------|---|--|---|
| Processor type & speed | Intel® i5-6300U | N/A | N/A |
| Memory | 8 GB | N/A | Related to Windows 10 or Windows 11 requirements. |
| Internal Storage/devices/media | 20 GB | >100 GB | N/A |
| Printing devices | not required | N/A | Only a default printer must be set in the OS. |
| Communication interface | 1-2x Serial RS-232 ports or 1x USB port | | |
| Display devices | 1280 x 1024 pixels | Screen resolution must not exceed 1890x1280 pixels | Scaling above 100% can cause artifacts. |

Networking Specifications

Special Notes

- Agilent recommends operating the system only within a closed and secured network.
- Known issues with the accompanying software are published online:
<https://www.agilent.com/cs/library/support/Patches/SSBs/G2946CA-G2949CA.html>

Service Engineer Review (Optional)

Service Engineer Comments

If the Service Engineer completed a review of the Site Preparation requirements with the customer, the Service Engineer should complete the following Comments section.

If there are any specific points that should be noted as part of performing the service review or other items of interest for the customer, please write in this box.

Site Preparation Verification

Service Request Number:

Date of Review:

Service Engineer Name:

Customer Name:

Service Engineer Signature:

Total number of pages in this document: