

Agilent CrossLab Start Up Services

Agilent 7100 Capillary Electrophoresis 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, Sampler, Barcode Reader, 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** as well as laboratory gases, tubing.
- The **power requirements** related to the product (e.g. **number & location** of electrical outlets).
- The **required operating supplies** necessary for the product and installation.
- 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.

Important Customer Web Links

- To access **Agilent University**, visit <http://www.agilent.com/crosslab/university/> to learn about training options, which include online, classroom and onsite delivery. A training specialist can work directly with you to help determine your best options.
- To access the **Agilent Resource Center** web page, visit <https://www.agilent.com/en-us/agilentresources>. The following information topics are available:
 - Sample Prep and Containment
 - Chemical Standards
 - Analysis
 - Service and Support
 - Application Workflows
- 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/user/agilent>
- **Need to place a service call?**
<https://www.agilent.com/en/promotions/flexible-repair-options>

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. Also pay special attention to the total weight of the modules you have ordered to ensure your laboratory bench can support this weight.

Special Notes

The following table provides dimensions and weight requirements.

Instrument Description	Weight		Height		Depth		Width	
	kg	lbs	cm	in	cm	in	cm	in
G7100A	35	77.2	59	23.3	51	20.1	35	13.8

Equipment Positioning on the Bench

- The G7100A Capillary electrophoresis instrument needs an additional 2.5 cm (1.0 in) of space on either side and approximately 8 cm (3.1 in) in the rear for air circulation and electric connections.
- Additional space is required on top of the dimensions listed in **“Dimensions and Weight”** on page 4 for height, in order to open the instrument lid. Please avoid locations with low overhanging shelves.
- Consider potential bench requirements for the Computer System or an external water bath separately (not part of the system).
- Connection for liquid cooling and drainage for condensates is located at the left rear side of the instrument. Connections for LAN and line power are located at the right rear side of the instrument.
- The instrument should be operated in an upright position.

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 Capillary Electrophoresis System (G7100A) can be operated up to a maximal altitude of 2000 m (6500 ft).
- The operation conditions must be non-condensing. Condensation might lead to arcing, which influences performance and lifetime of system components. Consider external liquid cooling might reduce the temperature of the tray below the apparent dew point of the ambient air. Install a drainage tube.
- The site's ambient temperature conditions must be stable for optimum performance of the system's modules. Temperature changes below 2 °C/h (as defined by ASTM conditions) are required to achieve best possible baseline stability. Higher variations will definitely result in higher signal drift and wander of the baseline.

NOTE

If the conditions of the following table are not met, please consider the installation of a dehumidifier and/or humidity monitoring device. For the G7100A Capillary Electrophoresis Instrument, the values for operating temperature range and humidity range are crucial to avoid condensation and arcing/leak current as a consequence.

Instrument Description	Operating Temperature Range °C (F)	Operating Humidity Range %
G7100A	5 – 40 °C (41 – 104 °F)	below 80 % at 31 °C (87.8 °F)

Power Consumption

Special Notes

- If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
- One AC power outlet is required for the G7100A instrument in addition to the Computer System (if applicable). Connection for line power is located at the right rear side of the instrument.
- The instrument has automatic line sensing, wide ranging power supplies.
- Heat dissipation at maximum: 1024 BTU/h.

Instrument Description	Line Voltage and Frequency V, Hz	Maximum Power Consumption VA	Maximum Power Consumption W
G7100A	100 – 240 V (AC) ($\pm 10\%$) 50 or 60 Hz ($\pm 5\%$)	350 VA	300 W

- Use the correct power cord.

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-us/products/lab-supplies>

Special Requirements and Other Considerations

Gas Selection

An external pressure supply of oil-free air or nitrogen with a maximum pressure of 15 bar (218 psi) can be used. Respective male adapter fitting into the instruments female adapter and PTFE tubing (1/8" OD x 1/16" ID PTFE Tubing) are part of the accessory kit of the instrument. External pressure is only needed for applications running in CEC mode (capillary electrochromatography) or CE+p mode (capillary electrophoresis mode with optional usage of higher pressure).

NOTE

Adding a suitable connector to the external pressure supply is the responsibility of the customer.

LAN Connection

Per default, the G7100A instrument will be connected via a 3 m (9.8 ft) crossover cable to the Computer System. In case the instrument should be connected to the LAN: provide IP address, subnet mask address, and gateway address for instrument and PC.

Tools

Your Agilent instrument comes with a few basic tools and consumables which are relevant to the specific configuration of your system.

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. Both the Service Engineer and the customer should complete the Site Verification section below.

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

Site Preparation Verification

Service Request Number:

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Date Service Completed:

.....

Service Engineer Name:

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Customer Name:

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Service Engineer Signature:

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Customer Signature:

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Total number of pages in this document:

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