Hardware Site Preparation Specification

Purpose of Procedure

Your site must meet this specification or set of requirements to assure a successful and timely installation of your Agilent instrumentation. This document is designed to prevent delays during installation, familiarization, and the initial use of the system in your application. This document outlines the supplies, consumables, space and utility requirements for a G7100 Capillary Electrophoresis Instrument. It also recommends tools and consumables that may help you get started. Use this document along with the Instrument documentation and Consumable Catalog. This information is also available from Agilent Technologies, Inc.'s website (http://www.agilent.com).

Customer Responsibilities
Make sure your site meets this specification, including: the necessary space, electric outlets, gases, tubing, operating supplies, consumables and other usage dependent items such as filter, vials, pipettes, syringes, capillaries and reagents required for the successful installation of instruments and systems. An installation qualification kit containing buffers and a test sample and a startup kit with capillaries is delivered with the instrument. 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 Information
If you have problems in providing anything described as a *Customer Responsibility*, please contact your local Agilent Technologies office for assistance. Assistance with user specific applications may be provided but should be contracted separately.

Dimensions and Weight

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Select the laboratory bench space before your system arrives. Pay special attention to the total height requirements. Avoid bench space with overhanging shelves. Pay special attention to the total weight of the modules you have ordered. Make sure that your laboratory bench can support this weight. The instrument should be operated in an upright position.

Weight	instrument	35 kg	(77.2 lbs)
Dimensions	height	59.0 cm	(23.2 inches)
	width	35.0 cm	(13.8 inches)
	depth	51.0 cm	(20.1 inches)

The G7100 Capillary electrophoresis instrument needs an additional 2.5 cm (1.0 inch) of space on either side and approximately 8 cm (3.1 inches) in the rear for air circulation and electric connections. Please consider potential bench requirements for the Computer System or an external waterbath 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.

Environmental Conditions

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Operating the Capillary Electrophoresis System within the recommended temperature ranges einsures optimum instrument performance and lifetime. Performance can be affected by sources of heat and cold from heating, air conditioning systems, or drafts.

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

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.

Please Note:
The site's ambient temperature conditions must be stable for optimum performance of the system's modules. Temperature changes of 2°C / hour or less (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.

Power Consumption

One AC power outlet is required for the G7100 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. It operates with line voltages in the range of 100-240 V AC, +/- 10%. Line frequency of 50 or 60 Hz ± 5% can be used.

Power consumption is 350 VA, 300W and 1024 BTU/h at maximum.

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 in the accessory kit of the instrument. External pressure is only needed for applications running in CEC mode (Capillary electro chromatography) or CE+p mode (capillary electrophoresis mode with optional usage of higher pressure). Adding a suitable connector to the external pressure supply is in responsibility of the customer.

LAN connection:
Per default the G7100 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.

G7100-90600

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