

Agilent 8700 LDIR Chemical Imaging System

Site Preparation Checklist

Thank you for purchasing an Agilent *instrument*. 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.

Introduction

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 environmental conditions for the site as well as laboratory gases, plumbing and extraction.
- The power requirements related to the product (e.g. number and location of electrical outlets).
- The 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.
- Please consult the Special Requirements section for other product-specific information.

Customer Information

- 1 If you have questions or problems in providing anything described as a Customer Responsibility, please contact your local Agilent or partner support service organization for assistance before the scheduled installation. In addition, Agilent and/or its partners reserve the right to reschedule the installation dependent upon the readiness of your site.
- 2 Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-arrange any services that have been purchased.
- 3 Other optional services such as extra training, compliance services and consultation for user-specific applications may also be provided at the time of installation. Please discuss with your Agilent Sales representative before the installation is scheduled.

Important Customer Web Links

- Videos about specific preparation requirements for your instrument can be found by searching the *Agilent YouTube* channel at <https://www.youtube.com/user/agilent>
- 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.
- A useful *Agilent Resource Center* web page is available, which includes short videos on maintenance, quick lists of consumables for new instruments, and other valuable information. Check out the Resource Page here: <https://www.agilent.com/en-us/agilentresources>
- Need technical support, FAQs, supplies? – visit our *Support Home page* at <http://www.agilent.com/search/support>
- Microsoft Hardware Compatibility List: <https://sysdev.microsoft.com/en-us/Hardware/lpl/>
- Links to specific O/S fixes, updates needed: <http://support.microsoft.com/>
- Get answers. Share insights. Build connections:
Join the *Agilent Community* at <https://community.agilent.com/welcome>

Site Preparation

Dimensions and Weight

Identify the laboratory bench space before your instrument arrives based on the following table.

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

- 1 You must follow for the circulation of air cooling, allow for 10 cm (4 inches) of space on both sides and approximately 15 cm (6 inches) in the rear for electrical, gas connections and air flow.
- 2 The computer, including the keyboard is approximately 50 cm (19.7 inches) wide and 60 cm (23.6 inches) deep.
- 3 The power cord and communication connection are located at the rear of the instrument. The power switch is also located at the rear of the instrument.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs	cm	in	cm	in	cm	in
8700 LDIR including Clearance Requirements	45.2	100	38	15	82	32	52	20.5
8700 LDIR in Shipping Container	72.5	160	68	27	95	37.5	82	32
8700 LDIR + Sample Planer + PC Typical Bench Space Requirements	N/A	N/A	N/A	N/A	90	35.5	190	75

Computer Hardware Specifications for Workstations

The 8700 LDIR has been tested and qualified using the HP Z4G4 Workstation only. It is highly recommended to purchase the operating console through Agilent to make sure the PC is fully compliant with the 8700 LDIR systems requirements.

Should you wish to purchase a PC independently, the below minimum specifications apply.

Specification Description	Minimum Specifications
PC	Hewlett-Packard Z4 G4 Minitower (Workstation)
Processor type and speed	Intel Core i7-7700K or better
Memory	32GB DDR4 RAM
Internal storage/devices/media	512GB PCIe SSD

Specification Description	Minimum Specifications
Video memory	2GB
Display	4K Capable
Ports	2x RJ-45 (1 GbE)

Software Specifications for Workstations

Specification Description	Minimum Specifications
Operating system name, version	Windows 10 Pro 64
O/S .NET and other add-ons	Microsoft .NET Framework 3.5

Environmental Conditions

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

Special notes

- 1 Performance can be affected by sources of heat and cold, e.g., direct sunlight, heating/cooling from air conditioning outlets, drafts, and/or vibrations.
- 2 The laboratory's ambient temperature conditions must be stable for optimum performance.
- 3 For optimum performance the area should have a dust-free, low humidity atmosphere. A layer of dust on the electronic components and heat sinks could act as an insulating blanket and reduce heat transfer to the surrounding air.
- 4 The 8700 LDIR is designed for operation in clean air conditions. The laboratory must be free of all contaminants that could have a degrading effect on the instrument's components.
- 5 Air conditioning is recommended. The site's ambient temperature conditions must be stable for optimum performance. It is a requirement that the ambient temperature of the laboratory be between 20 and 30 °C and be held stable throughout the entire working day.
- 6 To achieve the specified instrument stability, changes in environmental temperature must remain at: 1°C per hour or less is required. Higher variations will result in drift.
- 7 The 8700 LDIR can be stored at altitudes up to 4,600 m (15,000 ft.) and operated at altitudes up to 2,000 m (6,562 ft.).
- 8 Purge Gas must be run 24/7
- 9 It is recommend the 8700 LDIR be left powered on to maintain its equilibrium.

Instrument Description	Operating Temperature Range °C (F)	Operating Humidity Range %	Heat Dissipation BTU
8700 LDIR (Operating Conditions)	20 to 30 (68 to 86)	50 to 80%, at 30°C	N/A
8700 LDIR (Non-operating Conditions)	-40 to 70 (-40 to 158)	Up 90% for 12 hours at 65°C	N/A

Power Consumption

Special notes

- 1 If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
- 2 A separate power outlet receptacle should be provided for the 8700 LDIR system.
- 3 Always operate your instrument from a power outlet which has a ground connection. Making certain that power outlets are earth-grounded at the grounding pin.
- 4 Good electrical grounding is essential to avoid potentially serious shock hazards and for the instrument to perform within its specifications.
- 5 All power supplies for the 8700 LDIR must be single-phase, AC voltage, three-wire system (active, neutral, earth) with ground connection must be provided and should be terminated at an appropriate power outlet receptacle that is within reach of the power cord.
- 6 The use of extension cords or outlet adaptors is not recommended.
- 7 The 8700 LDIR system is supplied with power cord and three-pin plug assembly that is designed for your region and is compatible with common standards applicable in the local area.
- 8 Do not position the equipment so that it is difficult to operate the disconnecting device.
- 9 Avoid using power supplies from a source that may be subject to electrical or RF interference from other services (large electric motors, elevators, and welders, for example).
- 10 Power cords are provided based on the user's country requirements. Only the supplied power cord is to be used with this equipment. The installation of electrical power supplies must comply with the rules and/or regulations imposed by local authorities responsible for the supply of electrical energy to the workplace.
- 11 If necessary, replace the power cord only with a cord equivalent to the one specified.

Instrument Description	Line Voltage and Frequency V, Hz	Maximum Power Consumption VA	Maximum Power Consumption W
8700 LDIR	100~240 VAC 50~60 Hz	236	212

Power Cables for Instrument and PC

Part Number	Description
8120-0674	Power Cord - Thailand and Philippines
8120-1369	Power Cord, Australia/NZ, C13, 10 amp
8120-1378	Cable Assembly-Power Cord 18AWG 2.3m-LG
8120-2104	Cable-Assembly-Power Cord 250VAC 10A 3-C
8120-3997	Power Cord, DK/Greenland, C13, 10 amp
8120-4211	Power Cord, India/S Africa, C13, 10 amp
8120-4753	Power Cord, Japan, C13, 125V
8120-5182	Power Cord, Israel, C13, 10 amp
8120-6869	Power Cord, Argentina, C13 250V 10A RA/3
8120-6978	Power Cord, Chile, C13, 10 amp
8120-8705	Power Cord, GB/HK/SG/MY, C13, 10 amp
8121-0723	Cable-Assembly Power-Cord 3-Conductor 25
8121-1226	Power Cord, Europe + S Korea C13, 10A, 250V
8121-1635	Power Cord - Taiwan
8121-1638	Power Cord - Cambodia
8121-1809	Power Cord, Brazil, C13, 250V Max

Required Operating Supplies by Customer for Installation

Special notes

- 1 Download the Essential Chromatography and Spectroscopy Supplies Catalogs for a complete overview about available supplies for your new and existing Agilent Instruments
<https://www.agilent.com/en-us/products/lab-supplies>

The 8700 LDIR requires the supply of purge gas. Purge gas must be clean water-free compressed air, better than or equal to ISO 8573-1:2010 Class 2.2.1 or dry nitrogen.

The gas supply regulator pressure setting may need to be adjusted to ensure the pressure is in the permissible pressure range when delivering the gas flow demanded during operation.

Operating pressure is recommended at 138 kPa (20 psi). Ensure a suitable regulator and gauge assembly is installed to maintain purge gas supply at correct pressure.

The Purge Flow Kit supplied with each system contains a flowmeter and a 6 mm OD polyurethane tubing. The recommended flow rate for a purge: 10 L/min (20 cubic ft./hr) and to be run 24/7 to protect the internal components from environmental damage.

The tubing is used for connection to the instrument purge connector. Tubing should be clean and free of any dust and debris. Do not use tubing treated with talcum powder.

Item Description	Quality
Purge gas (Clean water-free compressed air or dry nitrogen)	ISO 5 ISO 8573-1:2010 Class 2.2.1