

Agilent InfinityLab LC/MSD iQ

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.
- For more details, please consult the product-specific site preparation or pre-installation manual.
- 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.

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>
- 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. The Agilent InfinityLab LC/MSD iQ dimensions represent the maximum cabinet dimensions with a Spray Chamber installed.
2. At least 30 cm (1 ft.) to the left, right and rear of the instrument must be added to the dimensions to provide adequate instrument access and ventilation.
3. The supporting surface must be relatively vibration free and capable of supporting the combined mass of the Agilent InfinityLab LC/MSD iQ system and HPLC system

Shipping Container

Dimensions: D 28" x W 23" x H 25" / D 71.1 cm x W 58.4 cm x H 63.5 cm

Weight: 125 lbs / 57 kg

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs	cm	in	cm	in	cm	in
Agilent InfinityLab LC/MSD iQ	47	104	33	13	54.6	21.5	39.6	15.6
MS40+ Smart Pump	33	72.7	29.7	11.6	41.8	16.5	22.8	8.9
G1948B Electrospray Source	1.7	3.8	17	6.6	9.5	3.7	18	7

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 The Agilent InfinityLab LC/MSD iQ is specified for operation under the following conditions:
 - a. Indoor use
 - b. Constant temperature (< +/-3°C from calibration temperature)
 - c. Non-condensing, non-corrosive atmosphere.
- 4 Altitude: Not to exceed 3,300 m up to 35°C, not to exceed 3,700 m up to 30°C

Instrument Description	Operating Temperature Range °C (F)	Operating Humidity Range %	Heat Dissipation BTU
Agilent InfinityLab LC/MSD iQ with MS40+ SmartPump	15 - 35 °C (59 - 95 °F)	< 85% RH @ 35 °C	Up to 6800 BTU/hr, (2000 Watts)

Power Consumption

Special notes

- 1 If a computer system is supplied with your instrument, be sure to account for those electrical outlets.

Instrument Description	Line Voltage and Frequency V, Hz	Current A	Maximum Power Consumption VA
Agilent InfinityLab LC/MSD iQ	100-120 VAC @ 50/60 Hz or 200-240VAC @ 50/60 Hz	15 A	500
MS40+ SmartPump	100-120VAC @ 50/60 Hz with optional transformer	15 A	1200
	200-240 VAC @ 50/60 Hz	15 A	1200

2 Mains supply voltage tolerances must be between +10% and -5% of nominal line voltage

Configuration	Measurement	Nominal Voltage
Single Phase	Line to neutral	100-120 VAC or 200-240 VAC
	Line to ground	100-120 VAC or 200-240 VAC
	Ground to neutral	Less than 0.5V rms

Declaration for detachable power cord (弊社提供の電源コードセットが汎用性がない旨を示す)

電源コードセットの取扱いについて (日本国内向け)

製品には、同梱された電源コードセットをお使いください。
同梱された電源コードセットは、他の製品では使用できません。

Notice - The power cords for Japan market

Your product must use only the power cord that was shipped with the product.
Do not use this power cord with any other product.

Required Operating Supplies by Customer for Installation

Special notes

- 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>

For information on Agilent consumables, accessories and laboratory operating supplies, please visit <http://www.chem.agilent.com/en-US/Products-Services/Services/Pages/default.aspx>

Item Description (including Dimensions etc.)	Vendor's Part Number (if applicable)	Recommended Quantity
Formic Acid Reagent Grade	G2453-85060	2
HPLC Flushing Solvent (500 mL)	G1969-85026	1
Methanol, LC/MS (1 L)	5190-6896	1
Acetonitrile, LC/MS (1 L)	G2453-85050	2
Water, LC/MS (4 L)	5190-6897	1

Special Requirements



1 Special Notes

Nitrogen Gas Supply Requirement

Model	Nitrogen Source	Nitrogen Purity	Pressure	Typical Flow (L/min) ESI Source
Agilent InfinityLab LC/MSD iQ	Liquid Nitrogen Dewar or Nitrogen Generator	≥ 95% pure and hydrocarbon free	5.5 - 6.8 bar (80 - 100 PSI)	16 L/min Maximum

1. Impurities from liquid Nitrogen Dewar being oxygen only
2. "Hydrocarbon free" means < 0.1 PPM hydrocarbons with the remaining gas being oxygen and trace argon.
3. Nitrogen Pressure as measured at the Agilent InfinityLab LC/MSD iQ inlet (not the supply side).
4. Minimum Nitrogen Flow required at all times to prevent air from entering the instrument.
5. Main Nitrogen Supply fittings are ¼" Swagelok.



Exhaust Venting Requirements

The Agilent InfinityLab LC/MSD iQ foreline pump exhaust and spray chamber exhaust must be vented outside of the laboratory environment. Exhaust vent system should not be part of an environmental control system that re-circulates air inside of a building. Exhaust venting requirements need to comply with all local environmental and safety codes.

1. A 6 meters (20ft.) length of ½ inch i.d. PVC/vinyl tubing is included for venting the foreline pump exhaust and ion source ESI exhaust. This is sufficient for 3 meters (10-foot lengths) each.

2. The foreline pump exhaust and the ion source exhaust cannot share the same exhaust tubing. Separate ½ inch hose barbs are required to connect the tubing to the exhaust vent. If both exhaust tubes are being connected to a common exhaust system, the source exhaust tube must be upstream of the foreline pump exhaust.

Out Source	Ventilation Draw Range	Minimum Flow	Maximum Flow
Foreline Pump	0.01 to 0.1 inches of water (0.025 to 0.25 mBar)	1.0 L/min (2.1 ft ³ /hr)	Up to 3 L/min (6.4 ft ³ /hr)
Agilent InfinityLab LC/MSD iQ System	0.01 to 0.1 inches of water (0.025 to 0.25 mBar)	5 L/min (10.6 ft ³ /hr)	Up to 16 L/min (33.9 ft ³ /hr)

IMPORTANT: Excessive draw from the fume exhaust system to the source can negatively affect the performance of the Agilent InfinityLab LC/MSD iQ system.

Note: Separate Source and Exhaust Venting.

Equipment positioning on the bench.

Agilent recommends standard stacking configurations for your new system depending on the number and type of included modules. Please consider:

1. Equipment positioning on the bench
2. Waste liquid & gas management
3. Special safety precautions to be taken



Figure 1. Agilent InfinityLab LC/MSD iQ stack configuration

Waste liquid and gas management.

- 1 <<Special safety precautions to be taken. >>