Agilent CrossLab
From Insight to Outcome

Agilent CrossLab Start Up Services

Agilent FTIR 4500/5500 Mobile/Compact 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.

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Agilent

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 (i.e., samplers 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

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Important Customer Web Links

- To access Agilent training and education, visit http://www.agilent.com/chem/training 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?** Flexible Repair Options | Agilent

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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

- Instrument will be delivered in a dedicated carry case. Please consider a storage space and do keep the case for any future shipment or transportation.
- The weight and the dimensions of the system allow it to be placed on almost any desk or laboratory bench but remember to provide enough space for the laptop or computer, monitor and printer and any additional accessories that have also been purchased.
- The computer, including the keyboard is approximately 50 cm (19.7 inches) wide and 60 cm (23.6 inches) deep.
- Ensure that the workbench is free from vibration. Any equipment generating vibration during operation must be placed on the floor rather than alongside the Series 4500/5500 FTIR instrument on the workbench.
- Do not subject the instrument to any shocks.
- The power cord, communication connection and power button for the FTIR 4500 instrument are located at the left side of the instrument.
- The power cord and communication connection for the FTIR 5500 instrument is located at the rear and the power switch at the front of the instrument.

The following table provides dimensions and weight requirements.

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Dimensions and Handling Weights (without packaging)

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs.	cm	in	cm	in	cm	in
Series 4500 FTIR Instrument	6.8	15.0	19.1	7.5	21.6	8.5	29.2	11.5
Molicel Lithium-Ion Rechargeable Battery Pack (built-in in the 4500 FTIR)	0.5	1.1	8.9	3.5	15.0	5.8	2.0	0.8
Series 5500 FTIR Instrument	3.6	8.0	11.4	4.5	20.3	8.0	20.3	8.0

Dimensions and Handling Weights (packaging included)

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs.	cm	in	cm	in	cm	in
Series 4500 FTIR Instrument	19.0	41.9	35.1	13.8	49.1	19.3	62.1	24.4
Series 5500 FTIR Instrument	16.0	35.3	35.1	13.8	49.1	19.3	62.1	24.4

Equipment Positioning on the Bench

FTIR 4500

- Always lift the FTIR 4500 instrument using the handle on the instrument lid.
- Ensure the instrument lid is closed and secured with the locking levers before lifting onto the bench.

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 flat, stable and vibration free.

- The instrument must be kept away from hot surfaces and any sources of electromagnetic interference.
- The site's ambient temperature conditions must be stable for optimum performance.
- For optimum analytical performance, it is recommended that the ambient temperature of the laboratory be between 20 and 25 °C and be held stable within ±2 °C throughout the entire working day.
- The FTIR 4500/5500 Mobile/Compact instrument 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.
- 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.
- Any spills must be cleaned up immediately.
- After receiving the Agilent FTIR 4500/5500 Mobile/Compact delivery, do not immediately open the shipping container. Instead, place the shipment in a room-temperature environment and allow several hours for the contents of the container to reach room ambient temperature. This is to avoid unnecessary condensation on the components prior to the initial setup and installation process.
- The FTIR 4500/5500 Mobile/Compact instrument can be operated at altitudes up to 2000 m (6,560 ft.).

  The following table may help you calculate the additional BTUs of heat dissipation from this new equipment. Maximums represent the heat given off when heated zones are set for maximum temperatures.

Instrument Description	Operating Temperature Range °C (F)	Operating Humidity Range %
Series FTIR 4500 Instrument During Operation	0 to 50°C, 32 to 122°F	Up to 95% non condensing
Series FTIR 4500 Instrument During Storage	-30 to 60°C, -22 to 140°F	Up to 95% non condensing
Series FTIR 5500 Instrument During Operation	0 to 50°C, 32 to 122°F	Up to 95% non condensing
Series FTIR 5500 Instrument During Storage	-30 to 60°C, -22 to 140°F	Up to 95% non condensing

Power Consumption

Special notes

- If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
- A separate power outlet receptacle should be provided for the FTIR 4500/5500 Mobile/Compact instrument.
- Always operate your instrument from a power outlet which has a ground connection. Make certain that power outlets are earth-grounded at the grounding pin.
- Good electrical grounding is essential to avoid potentially serious shock hazards and for the instrument to perform within its specifications.
- All power supplies for the FTIR 4500/5500 Mobile/Compact instrument must be single-phase, AC voltage, 3-wire system (active, neutral, earth) and should be terminated at an appropriate power outlet receptacle that is within reach of the power cord.
- Universal Power supply and a country dependent power cord are supplied with the FTIR 4500/5500 Mobile/Compact instrument.
- The use of extension cords or outlet adaptors is not recommended.
- Do not position the equipment so that it is difficult to operate the power switch.
- 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).
- 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.
- 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
Series 4500 FTIR Instrument with insertable Molicel Lithium-Ion rechargeable Battery Pack	100 – 240 V, 50 – 60 Hz	240 VA	60 W
Series 5500 FTIR Instrument	100 – 240 V, 50 – 60 Hz	240 VA	60 W

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

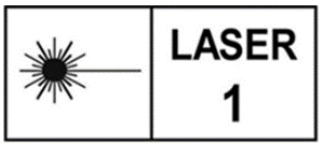
- Download the Essential Chromatography and Spectroscopy Supplies Catalogs for a complete overview about available supplies for your new and existing Agilent Instruments. https://www.agilent.com/en-us/products/lab-supplies
- The below items are included with the appropriate accessory but may also be obtained using the following part numbers from Agilent Technologies.

Item Description (including Dimensions etc.)	Vendor's Part Number (if applicable)	Recommended Quantity
Polystyrene Film for ATR	G8043-67405	1
Polystyrene Film for TumbIIR/DialPath	G8043-67406	1

Special Requirements and Other Considerations

Special notes

- Use of the 4500/5500 Series FTIR and accessories may involve materials, solvents and solutions that are flammable, corrosive, toxic or otherwise hazardous. Careless, improper, or unskilled use of such materials, solvents and solutions can create explosion hazards, fire hazards, toxicity and other hazards which can result in death, serious personal injury, and damage to equipment and property.
- ALWAYS ensure that safety practices governing the use, handling and disposal of such materials are strictly observed. These safety practices should include the wearing of appropriate safety clothing and safety glasses.
- Unpacking the equipment is your responsibility. As the packages are opened, ensure you received everything you ordered. If there are any discrepancies, notify the supplier. If any items are found to be damaged, immediately notify the carrier and supplier. Any differences from the original order should be referred immediately to your Agilent sales office.
- Your Agilent Series 4500/5500 FTIR spectrometer has been designed to comply with the requirements of the Electromagnetic Compatibility (EMC) Directive and the Low Voltage (electrical safety) Directive (commonly referred to as the LVD) of the European Union. Agilent has confirmed that each product complies with the relevant Directives by testing a prototype against the prescribed EN (European Norm) standards.



WARNING: Laser Hazard

- The Model 4500/5500 FTIR spectrometer contains a low-powered solid-state laser required for operation. The laser emits radiation and can cause injury to the eye. Do not stare directly into the beam.
- Class 1 Laser Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007 CDRH Accession No. 0321242 IEC 60825-1:2007


WARNING: Fire Hazard

- Series 4500/5500 FTIR spectrometer systems are NOT intrinsically safe. Use the system only in atmospheres that have been tested for flammable materials. If the equipment is used in a manner not specified in this manual, the protection provided by the equipment may be impaired.

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:

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