

Agilent CrossLab Start Up Services

Agilent ExD Cell 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, 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

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](#)
- For further information on the ExD cell, please visit [Electron capture dissociation for QTOF LCMS of proteins | Agilent](#)
- Please visit <https://exdviewer.agilent.com> for information on the ExDViewer data analysis freeware package. This freeware is subject to terms of use. Please read the End User License Agreement fully before downloading.

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.

NOTE: Only the ExD19 Controller module requires dedicated bench space apart from that already allocated to the 6545XT LC/Q-TOF.

Special notes

- The following table provides dimensions and weight specifications.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs.	cm	in	cm	in	cm	in
ExD Cell Assembly	3.6	8	33.6	13.2	29.3	11.5	43.2	17.0
Manifold Cover Assembly, ExD	1.8	4	22.4	8.8	13	5.1	70.2	27.6
ExD Controller, Model ExD19	3.2	7	36.2	14.3	19.4	7.6	41.3	16.3
Filament Cassette Assembly	0.9	2	12.8	5.0	7.7	3.0	20.3	8.0

Chemical storage

- Customer agrees to provide cold storage (< -20 °C) for the provided melittin chemical tuning standard.

Due to import restrictions, customers in the Greater China region will be required to source their own melittin tuning standard subject to the following purity requirements:

Item Description	Chemical identifier	Recommended Purity	Recommended Quantity
Melittin, nonamidated, lyophilized	GIGAVLKVLTTGLPALISWIKRKRQQ	> 95%	4 x 0.5mg

Equipment Positioning on the Bench

The ExD Controller requires a clear, level, raised surface that is:

- Capable of supporting 10 lbs (4.5 kg)
- Within 8 ft (2.4 m) of the flight tube
- Within 4 ft (1.2 m) of an available USB port on the instrument PC
- Within 8 ft (2.4 m) of an available port on the instrument ethernet switch
- Within 8 ft (2.4 m) of a main power outlet. (See **Power Consumption** section for details)

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 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 %
ExD Controller, model ExD19	15 to 35 (59 to 95)	20 - 85% non-condensing

- The internal components of the Agilent ExD Cell operate within the specifications outlined for the G6549 LC-QTOF. See [Agilent 6500 Series LC/QTOF Site Preparation Checklist](#)

Exhaust Venting Requirements

Requirements for exhaust venting are the same as the specifications outlined for the G6459 LC-QTOF. See [Agilent 6500 Series LC/QTOF Site Preparation Checklist](#).

Power Consumption

Special notes

- Power requirements and special considerations for the 6545XT LC/QTOF are outlined in the [Agilent 6500 Series LC/QTOF Site Preparation Checklist](#)
- For Agilent 1260/1290 InfinityLab LC modules, power requirements and special considerations [Agilent InfinityLab LC Series SFC Site Preparation Checklist](#)
- For all other accessories and/or alternative LC modules, please refer to their specification sheets for appropriate power requirement.

Instrument Description	Line Voltage and Frequency V, Hz	Maximum Power Consumption VA	Maximum Power Consumption W
External Power Supply	100-240 VAC, 50-60 Hz	80	60
ExD19 Controller	24 VDC	60	35 (actual)

- The correct regional power cord will be included with shipment. Please verify upon delivery.

LC/Q-TOF Operational Readiness

In order for the G1997A ExD Cell to meet specifications after installation, the 6545XT LC/Q-TOF must be in good working condition:

- Please provide the serial number and firmware version for the 6545XT LC/QTOF

SN: _____ **FW:** _____

- Is the instrument listed above a newly purchased 6545XT LC/QTOF or a previously installed instrument?

- Newly purchased 6545XT

- *The service engineer will ensure the instrument is performing to specifications during the QTOF installation. This section may be skipped.*

- Previously installed 6545XT

- *Please complete the remainder of this section*

- Instrument and instrument Calibrant Delivery System are operational. If unsure of the condition of your instrument, please contact an Agilent Field Service Engineer for assistance.

By confirming this, you are allowing a Field Service Engineer to use the initial operating state of the instrument at the time of installation as a benchmark for verifying post-installation system performance.

- Positive and negative polarity MassHunter Data Acquisition Q-TOF System Tunes have been recently completed and passed, using the standard preparation of tuning mix found in the Agilent 6200/6400/6500 LC/MS Maintenance Guide in the Agilent TOF and Q-TOF LC/MS Resource App. Please return reports with this document.

Prior to the date of scheduled product installation, please ensure that this condition is still satisfied.

- Dual Agilent Jet Stream (AJS) ESI source is operational and will be available for use during installation.

Highly recommended:

- An Agilent preventative maintenance has been completed at most three months prior to installation.

Instrument PC

Minimum requirements:

- Operating system is 64-bit Windows 10 or 11 Pro, Enterprise, or Enterprise LTSC
- 8GB available RAM
- Data acquisition software is **Agilent MassHunter Acquisition for TOF/Q-TOF 11.0 Update 2**.
- Local computer administrator privileges will be granted during installation to permit software installation.
 - Please arrange computer access privileges and network security permissions with your IT department, including but not limited to items such as firewall rules, antivirus exceptions, and access past Internet blockers.
 - It is *highly recommended* that IT is available to provide services during the installation.

Please indicate which of the following options will be available for the installation of the ExDControl software. Only one is required:

- Internet access to instrument PC will be granted for the duration of installation.

Internet access on the instrument control PC is highly recommended for installation and post-installation for remote diagnostics purposes.

- Not required:* Remote control/access capability to the local computer is provided. Please indicate your preference for one of the following methods:
 - Microsoft Teams
 - Cisco Webex
- A free USB port must be available on the instrument PC for a physical copy of the installation media.

Data Analysis Software Requirements/Recommendations

For checkout and introduction services, data analysis software will be required.

Required

- MassHunter Workstation Qualitative Analysis 10.0 (minimum), 12.0 recommended.

Highly Recommended

- MassHunter Workstation BioConfirm 12.1

BioConfirm 12.1 is NOT included with the standalone purchase of the Agilent ExD Cell. Please work with your sales representative on an upgrade path if desired.

- ExDViewer 4.6

ExDViewer is available as freeware subject to terms of use. It is available for download from <https://exdviewer.agilent.com>. Please read the End User License Agreement carefully before installing.

Required Operating Supplies by Customer for Installation

- For information on Agilent consumables, accessories, and laboratory operating supplies, please visit: <https://www.agilent.com/en-us/products/lab-supplies>
- Also please refer to the [Agilent 6500 Series Accurate Mass Q-TOF LC/MS Supplies Quick Reference Guide](#) for quick ordering of common LC/Q-TOF supplies.

Nitrogen Gas Supply Requirements

When heated, the ExD Cell filament is highly sensitive to oxygen exposure.

- Collision cell gas is nitrogen (UHP), $\geq 99.999\%$
- Collision cell gas supply line uses copper or stainless-steel tubing and metal fittings, not plastic or PTFE.
- Collision cell gas supply is fitted with a universal scrubber. (Agilent PN: RMSN-2)

Highly recommended:

- Collision cell gas is supplied from a separate cylinder, not from a generator.

Personnel and Other Supplies:

- Key instrument operator will be present during installation. **Name:** _____
- Customer agrees to provide LCMS-grade acetonitrile, water, and formic acid at the time of installation.
- For best results please refer to the [Agilent 6500 Series Accurate Mass Q-TOF LC/MS Supplies Quick Reference Guide](#) and/or the following table

Item Description (including Dimensions etc.)	Vendor's Part Number (if applicable)	Recommended Quantity
Acetonitrile, 1L	G2453-85050	1
High purity water, 4L	8500-2236	1
Formic Acid, 5 x 1mL	5191-4549	1

NOTE: Properly serviced Millipore, Milli-Q, or Ultrapure water is acceptable.

- Customer agrees to supply the following clean equipment for sample preparation and infusion at the time of installation:
 - Graduated cylinder (50mL)
 - Calibrated pipettes (2 μ L - 1000 μ L)
 - Calibrated analytical balance
 - Calibrated syringes
 - Nitrile gloves
 - Lint-free tissues/wipes

Special Requirements and Other Considerations

Waste liquid and gas management

- Please refer to the [Agilent 6500 Series LC/QTOF Site Preparation Checklist](#) for specifics on the waste liquid and gas management requirements of the 6545XT LC/QTOF
- Please refer to the [Agilent InfinityLab LC Series SFC Site Preparation Checklist](#) for specifics on the waste liquid and gas management requirements for any InfinityLab 1260/1290 LC module.
- For other installed accessories or LC modules, please refer to the pertinent specifications and preparation guides for those items.

Tools

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

Tools (provided)

- T5 Torx driver for filament insert exchange

Tools (recommended)

Item Description	Vendor	Part number	Quantity
Mini Brush with Fiberglass Bristles	Micro-Mark	14259	1

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: