



Agilent InfinityLab LC Series

1260 Infinity III Prime Bio LC System

System Manual



Notices

Document Information

The information in this document also applies to 1260 Infinity II and 1290 Infinity II modules.

Document No: D0006222 Rev. B.01
Edition: 09/2025

Copyright

© Agilent Technologies, Inc.
2021-2025

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Agilent Technologies, Inc. as governed by United States and international copyright laws.

Agilent Technologies
Hewlett-Packard-Strasse 8
76337 Waldbronn, Germany

Warranty

The material contained in this document is provided "as is," and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Agilent disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Agilent shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Agilent and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.

Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

Restricted Rights Legend

U.S. Government Restricted Rights. Software and technical data rights granted to the federal government include only those rights customarily provided to end user customers. Agilent provides this customary commercial license in Software and technical data pursuant to FAR 12.211 (Technical Data) and 12.212 (Computer Software) and, for the Department of Defense, DFARS 252.227-7015 (Technical Data - Commercial Items) and DFARS 227.7202-3 (Rights in Commercial Computer Software or Computer Software Documentation).

Safety Notices

CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

WARNING

A **WARNING** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a **WARNING** notice until the indicated conditions are fully understood and met.

Contents

In This Book 4

1 Introduction 5

Product Description of the 1260 Infinity III Prime Bio LC System 6

Features of the 1260 Infinity III Prime Bio LC System 7

System Components 8

2 Installation 16

Installing the System Modules 17

Optimizing the Stack Configuration 18

Integration Into the Network 23

Capillary and Tubing Connections in Flow Path 24

Handling Leak and Waste 25

3 Configuration Settings 35

General Information on LAN Configuration 36

Instrument Configuration 37

Lab Advisor 38

4 Quick Start Guide 43

Best Practices 44

Prepare a Run 45

InfinityLab LC Performance Check 55

5 Parts and Consumables 56

HPLC System Tool Kit 57

Additional Heater Devices 58

Valve Kits 60



In This Book

This manual covers the Agilent 1260 Infinity III Prime Bio LC System.
The instrument may only be operated by appropriately qualified and trained personnel.

1

Introduction

This chapter gives an introduction to the Agilent 1260 Infinity III Prime Bio LC System, the underlying concepts and features.

Product Description of the 1260 Infinity III Prime Bio LC System 6

Features of the 1260 Infinity III Prime Bio LC System 7

System Components 8

Product Description of the 1260 Infinity III Bio Flexible Pump (G7131C) 9

Product Description of the 1290 Infinity III Bio Multisampler (G7137A) 10

Product Description of the 1260 Infinity III Multicolumn Thermostat (G7116A) 11

Product Description of the 1260 Infinity III Diode Array Detector HS (G7117C) 12

Product Description of the 1260 Infinity III Diode Array Detector WR (G7115A) 13

Product Description of the 1260 Infinity III Variable Wavelength Detector (G7114A) 14

Product Description of the InfinityLab Level Sensing (G7175A) 15

Product Description of the 1260 Infinity III Prime Bio LC System

The 1260 Infinity III Prime Bio LC System is a versatile HPLC for bioseparations and offers outstanding functionality and operational convenience for bioanalytical HPLC and entry-level quaternary bio UHPLC at pressures up to 800 bar and flow rates up to 5 mL/min.

The Prime Bio LC System, consisting of biocompatible material for use in biopharma (e.g., critical quality attributes) and other applications utilizing high-salt and extreme-pH conditions, ensures the integrity of your biomolecules and robustness of the system.

Designed for use with InfinityLab Assist, Level Sensing and Sample ID Reader.

Features of the 1260 Infinity III Prime Bio LC System

- Biocompatible solvent and sample flow path ensure integrity of biomolecules and minimize unwanted surface interaction.
- High salt tolerance and wide pH range offer enhanced flexibility and robustness for increased instrument uptime.
- Power range combines high pressure up to 800 bar and high analytical flow rates up to 5 mL/min for maximum UHPLC performance.
- Based on the proven 1290 Infinity III technology for easy method transfer, also from legacy instrumentation, and reduced training effort.
- Shallow microplate drawers take a maximum load of 6144 samples for unmatched sample capacity.
- Agilent Buffer Advisor Software provides a fast and simple way to create salt and pH gradients, eliminating the tedious and error-prone method development steps of buffer preparation, buffer blending, and pH scouting.
- Different bio accessories include a range of bio heat exchangers, bio capillary kits, bio loops, and analytical heads to cover all the different application needs for instrument versatility and efficiency.
- A wide range of sensitive optical detection capabilities with various flow cells for VWD, DAD, FLD, Bio MDS, or LC/MS detection for exceptional adaptability.
- Equipped with InfinityLab Assist - adds an Intuitive User Interface, Automated Workflows, Predictive Maintenance and Assisted Troubleshooting.

System Components

The Agilent 1260 Infinity III Prime Bio LC System consists of the following components:

- Bio Flexible Pump (G7131C)
- Bio Multisampler (G7137A)
- Multicolumn Thermostat (G7116A) with Bio Heat Exchanger
- Diode Array Detector (G7115A, G7117C) and Variable Wavelength Detector (G7114A) with respective Bio flow cell
- Solvent Cabinet or InfinityLab Level Sensing (G7175A)

The Agilent 1260 Infinity III Prime Bio LC System is described in more detail in the following sections. All modules are stackable, see, [Optimizing the Stack Configuration](#) on page 18.

For specifications, please refer to the individual module user documentation.

Product Description of the 1260 Infinity III Bio Flexible Pump (G7131C)

The 1260 Infinity III Bio Flexible Pump is a UHPLC pump comprising biocompatible components, developed for biopharma applications and for other analyses requiring high-salt and extreme-pH conditions. This pump enables quaternary solvent delivery at pressures up to 800 bar and flow rates up to 5 mL/min.

The 1260 Infinity III Bio Flexible Pump combines high performance and simplified operation with remarkable flexibility in automated gradient formation and solvent blending. This pump also facilitates seamless method transfer using Intelligent System Emulation Technology (ISET) and automated buffer blending.

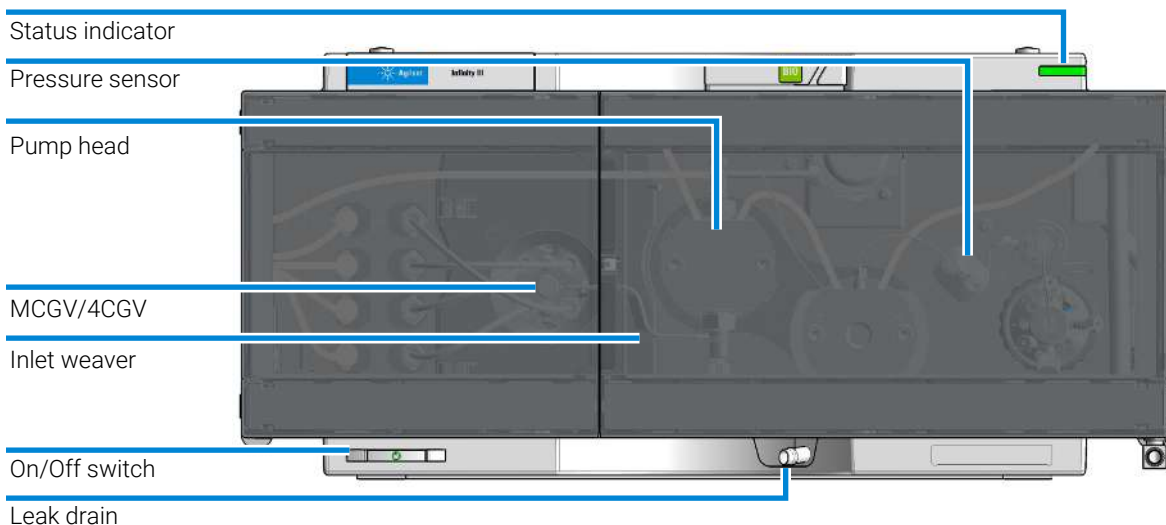


Figure 1: Overview of the Bio Flexible Pump

Product Description of the 1290 Infinity III Bio Multisampler (G7137A)

The Agilent 1290 Infinity III Bio Multisampler, with its biocompatible sample flow path, is perfectly suited for biomolecule analysis, ensuring integrity of biomolecules and minimizing unwanted surface interaction. For temperature-sensitive samples, a compressor-based thermostating device can be added.

Injecting at pressures up to 1300 bar, the Bio Multisampler is a compact module with a capacity of up to 6144 samples, all within the footprint of an Agilent LC stack. It is a multipurpose autosampler that handles vials and microplates, and is optimized for highest chromatographic performance.

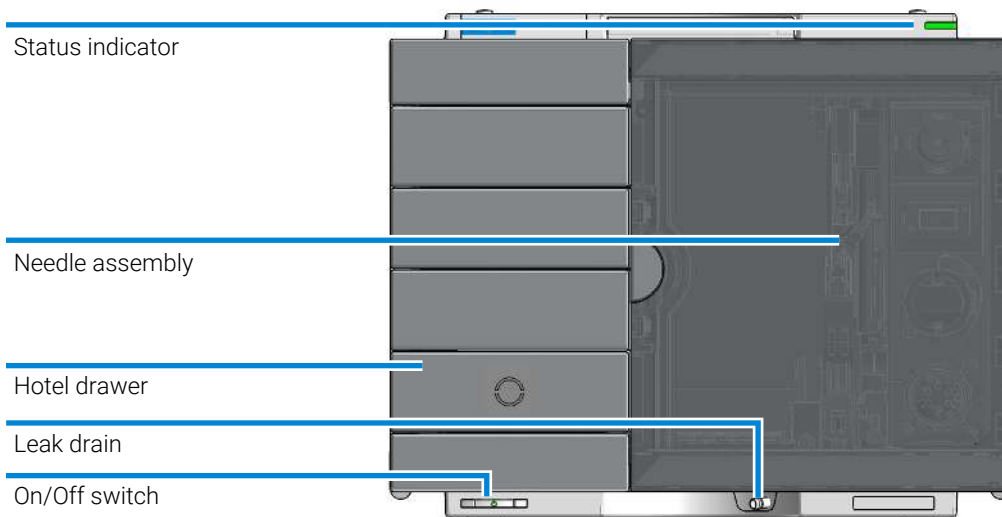


Figure 2: Overview of the Bio Multisampler

Product Description of the 1260 Infinity III Multicolumn Thermostat (G7116A)

The Agilent 1260 Infinity III Multicolumn Thermostat (MCT) facilitates precise column thermostating over a broad temperature range with cooling down to 10 °C below ambient temperature and heating up to 85 °C.

This capability provides robust and reliable separations for maximum application flexibility. Exchangeable high-pressure valves enable a wide range of applications such as column selection of up to four columns, sample preparation for analyte enrichment or matrix removal, or alternating column regeneration.

The MCT matches perfectly with all InfinityLab LC Series systems and can also be combined with 1290 Infinity III Series modules as well as with previous 1260 and 1290 Series modules.

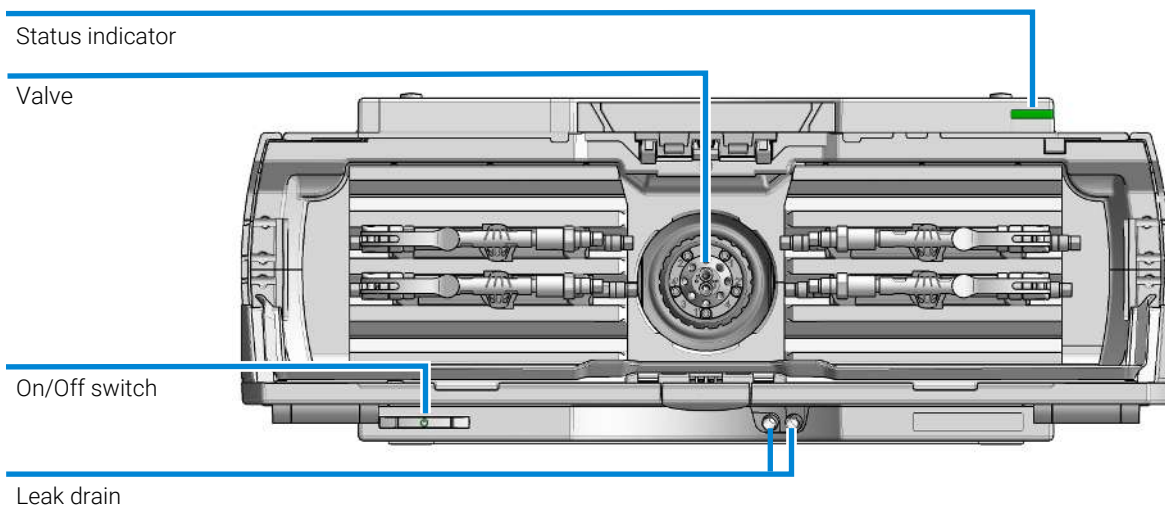


Figure 3: Overview of the Multicolumn Thermostat

Product Description of the 1260 Infinity III Diode Array Detector HS (G7117C)

The Agilent 1260 Infinity III Diode Array Detector HS (with fixed slit) is based on the Agilent Max-Light cartridge cell with optofluidic waveguides that improve light transmission to near 100% efficiency without sacrificing resolution caused by cell dispersions effects.

With typical detector noise levels of $< \pm 0.6 \mu\text{AU}/\text{cm}$ the 60 mm flow cell gives up to 10 times higher sensitivity than detectors with conventional flow cells.

Any compromising refractive index and thermal effects are almost completely eliminated, resulting in significantly less baseline drift for more reliable and precise peak integration.

For fast separations, this detector has multiple wavelength and full spectral detection at sampling rates up to 120 Hz.

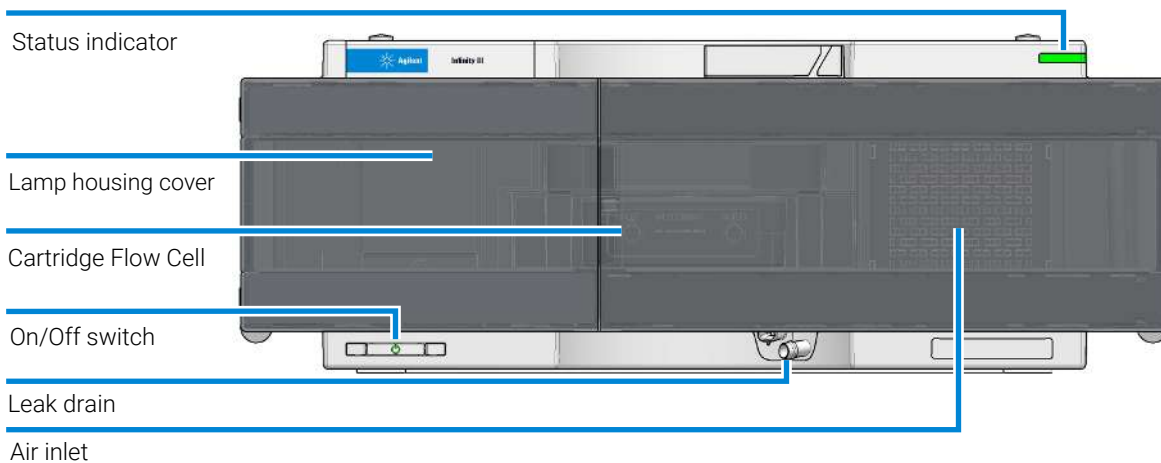


Figure 4: Overview of the G7117C Detector

Product Description of the 1260 Infinity III Diode Array Detector WR (G7115A)

The Agilent 1260 Infinity III DAD WR Detector is designed for highest optical performance, GLP compliance and easy maintenance. With its 120 Hz data acquisition rate the detector is perfectly suited for fast LC applications. The long-life deuterium lamps allow highest intensity and lowest detection limits over a wavelength range of 190 – 950 nm. The use of RFID tags for all flow cells and UV-lamps provides traceable information about these assemblies.

The built-in holmium oxide filter features the fast wavelength accuracy verification, while the built-in temperature controls improves the baseline stability. Additional diagnostic signals for temperature and lamp voltage monitoring are available.

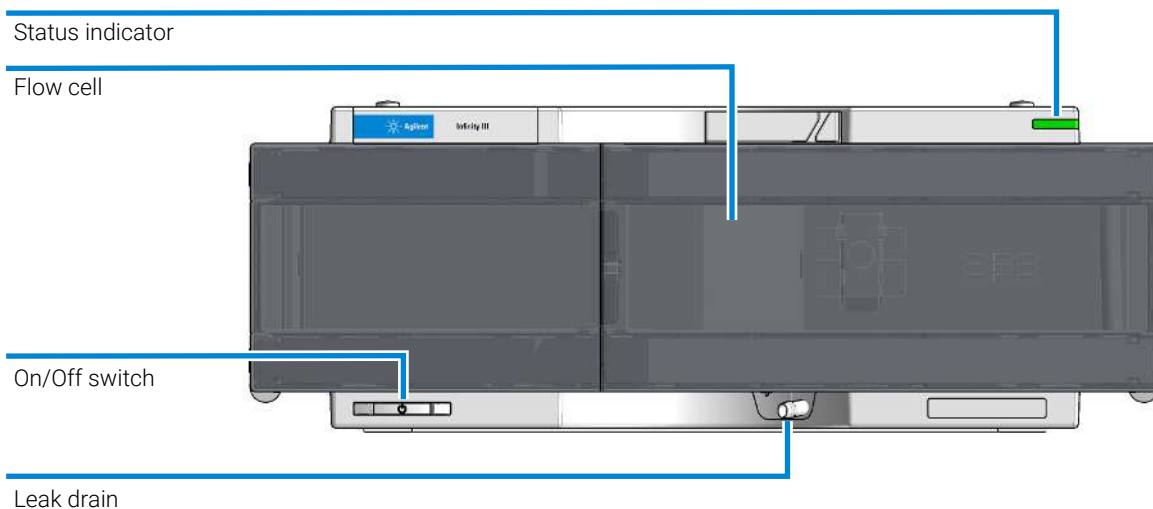


Figure 5: Overview of the G7115A Detector

Product Description of the 1260 Infinity III Variable Wavelength Detector (G7114A)

The Agilent 1260 Infinity III Variable Wavelength Detector (VWD) is the most sensitive and fastest detector in its class.

Time-programmable wavelength switching provides sensitivity and selectivity for your applications.

More sample information can be acquired in the dual wavelength mode.

Low detector noise ($< \pm 2.5 \mu\text{AU}$) and baseline drift ($< 1 \cdot 10^{-4} \text{AU/h}$) facilitates precise quantification of trace level components.

High productivity can be achieved with fast analysis at up to 120 Hz data rates.

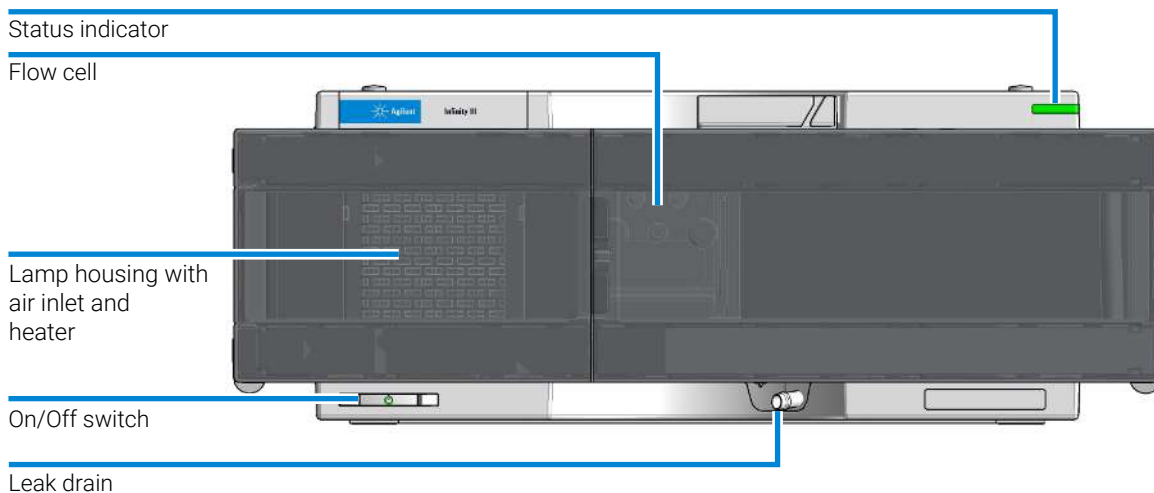


Figure 6: Overview of the G7114A Detector

Product Description of the InfinityLab Level Sensing (G7175A)

The Agilent InfinityLab Level Sensing prevents HPLC instrument or column damage, and time-consuming re-analysis because the mobile phase has run dry. This easy, straightforward system, when used together with OpenLab CDS, also offers a solvent prediction. This feature predicts your HPLC solvent consumption for a complete sequence and warns you before you start so that the injections complete successfully.

The InfinityLab Level Sensing module simplifies the process of LC system preparation and control during analysis. Accurate monitoring of solvent levels ensures optimal productivity.

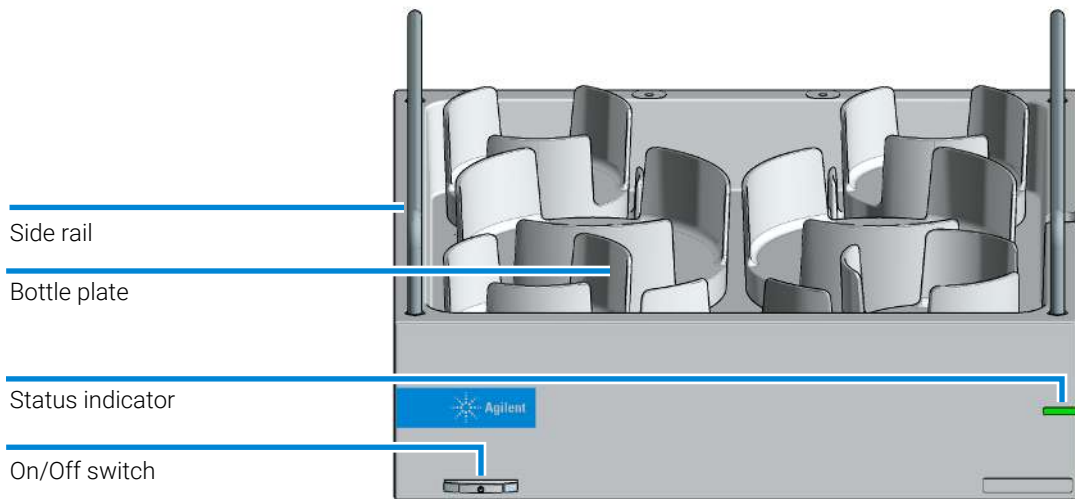


Figure 7: Overview of the Level Sensing module



2 Installation

This chapter provides information on unpacking, checking on completeness, stack considerations and installation of the module.

Installing the System Modules 17

Optimizing the Stack Configuration 18

Agilent InfinityLab Flex Bench 19

One Stack Configuration 21

Two Stack Configuration 22

Integration Into the Network 23

Capillary and Tubing Connections in Flow Path 24

Handling Leak and Waste 25

Drain Connectors Installation 29

Waste Concept 33

Waste Guidance 33

Leak Sensor 34

Installing the System Modules

For details of installation procedures for the modules, refer to the individual module manuals. These manuals also contain information on specifications, maintenance and parts.

Optimizing the Stack Configuration

You can ensure optimum performance by installing the system in one of the following configurations. These configurations optimize the system flow path, ensuring minimum delay volume.

The following configurations are possible:

- InfinityLab Flex Bench
- Single Stack (maximal 4 modules, in a bench rack or directly on the bench)
- InfinityLab Benchtop, providing more flexibility
- Two Stacks (in a bench rack or directly on the bench)

The table below summarizes the advantages of the different prescribed configurations.

Table 1: Overview on pros and cons of different stack configurations

Modules in a stack	InfinityLab Flex Bench Configuration	Single Stack Configuration	Two Stacks Configuration
fewer than 5	Pros <ul style="list-style-type: none"> • no bench required • mobile • optimal access to the modules, solvent bottles, pumps, columns, and accessories • integrated waste concept 	Pros <ul style="list-style-type: none"> • minimal bench space required Cons <ul style="list-style-type: none"> • high stack 	Pros <ul style="list-style-type: none"> • lower stacks • flexible combinations Cons <ul style="list-style-type: none"> • maximum bench space required
5 and more	+ possible	- not possible	+ possible

Agilent InfinityLab Flex Bench

Agilent recommends using the InfinityLab Flex Bench for all Agilent LC systems.

Main features:

- Increases flexibility in the lab
- Safe moving of LC
- Easy stack customization
- Included waste management

Installation

Optimizing the Stack Configuration

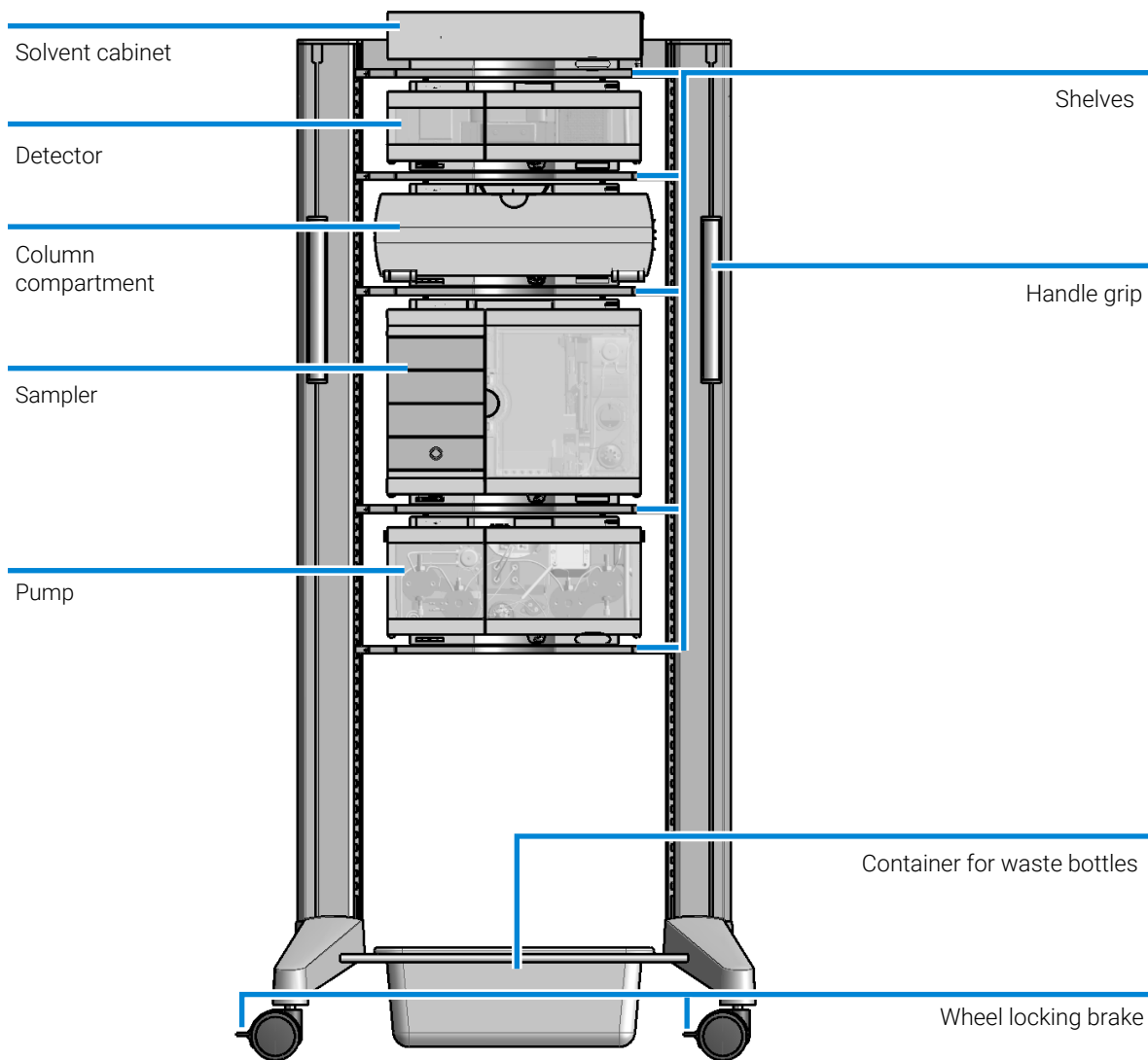


Figure 8: Agilent InfinityLab Flex Bench

One Stack Configuration

Ensure optimum performance by stacking the modules as shown exemplarily in [Figure 9](#) on page 21. This configuration optimizes the flow path for minimum delay volume and minimizes the bench space required.

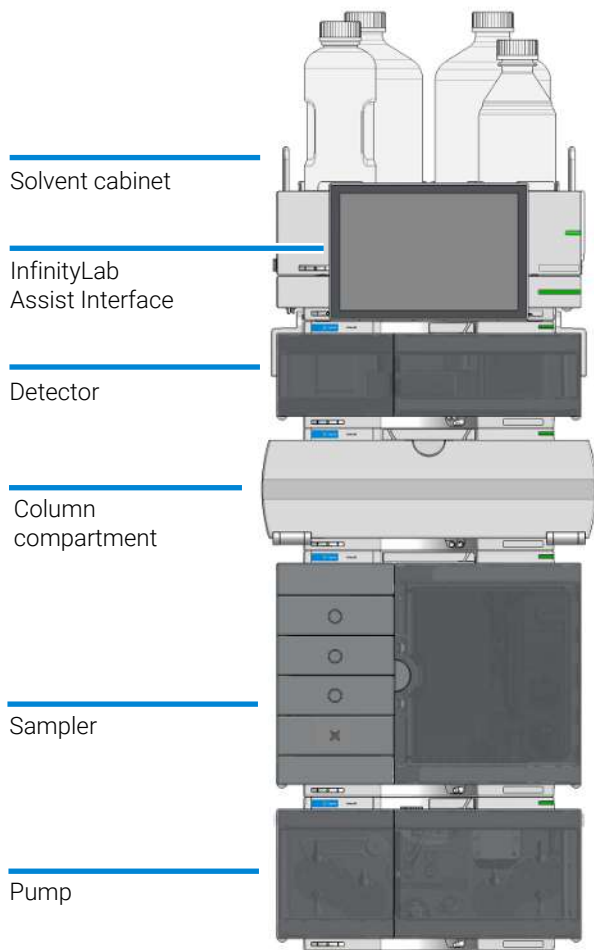


Figure 9: Single stack configuration (bench installation, example shows a Multisampler)

Two Stack Configuration

To avoid excessive height of the stack (for example when using the system in combination with an additional detector), it is recommended to form two stacks.

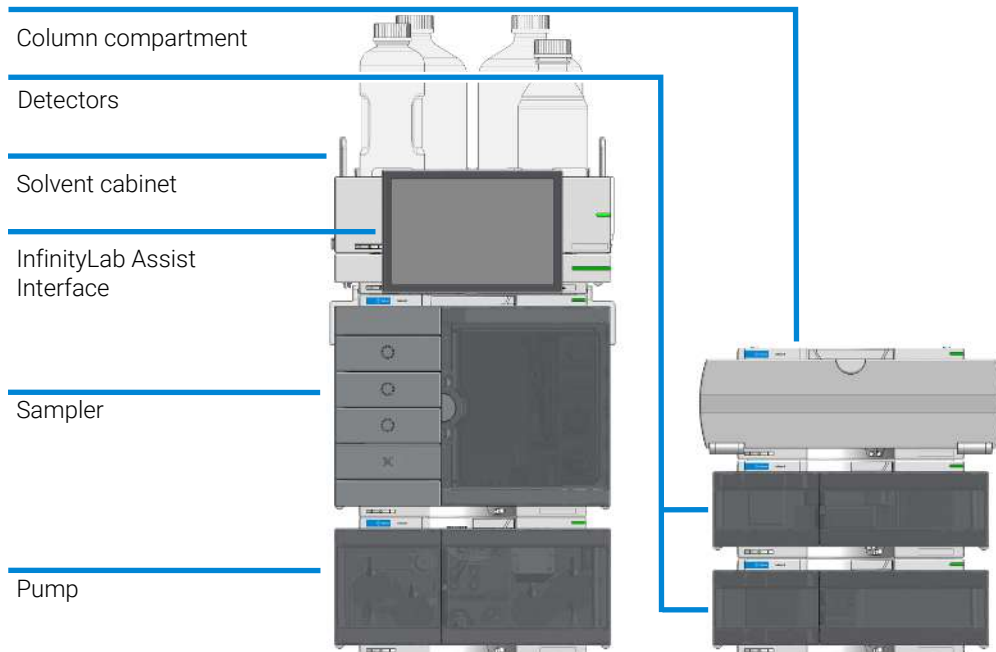


Figure 10: Two stack configuration (bench installation, example shows a Multisampler)

Integration Into the Network

For network integration of your system refer to user manuals of your modules (chapter *LAN Configuration*).

Capillary and Tubing Connections in Flow Path

Depending on the system configuration, you may need capillaries of different lengths. To achieve optimal LC results, the following Bio capillaries are available:

Table 2: Capillary connections for 1290 Infinity III Bio LC

p/n	From	To
G7120-60007 (Bottle Head Assembly, long (1730 mm))	Solvent Bottle	Infinity III Pump
5500-1419 (Capillary MP35N 0.17 mm x 500 mm, SI/SI)	Pump	Multisampler
5500-1279 (Capillary MP35N 0.12 mm x 500 mm SI/SI)	Multisampler	MCT
5500-1578 (Quick Connect Capillary MP35N 0.12 mm x 105 mm)	MCT Heat Exchanger	Column
5500-1596 (Quick Turn Capillary MP35N 0.12 mm x 280 mm)	Column/MCT Valve	Detector (DAD or 1290 FLD)
5500-1598 (Quick Turn Capillary MP35N 0.12 mm x 500 mm)	Column/MCT Valve	Detector (VWD)
5062-8535 (Waste accessory kit (Flow Cell to waste))	VWD	Waste
5062-2462 (Tube PTFE 0.7 mm x 5 m, 1.6 mm od)	DAD or 1290 FLD	Waste
G5664-68712 (Analytical tubing kit 0.25 mm i.d. PTFE-ESD)	Detector	Fraction Collector

See module manuals for module-internal capillary and tubing connections.

Handling Leak and Waste

The Agilent InfinityLab LC Series has been designed for safe leak and waste handling. It is important that all security concepts are understood and instructions are carefully followed.

The solvent cabinet is designed to store a maximum volume of 8 L solvent. The maximum volume for an individual bottle stored in the solvent cabinet should not exceed 2 L. For details, see the usage guideline for the Agilent Infinity III Solvent Cabinets (a printed copy of the guideline has been shipped with the solvent cabinet, electronic copies are available on the Internet).

All leak plane outlets are situated in a consistent position so that all Infinity and Infinity II/III modules can be stacked on top of each other. Waste tubes are guided through a channel on the right hand side of the instrument, keeping the front access clear from tubes.

The leak plane provides leak management by catching all internal liquid leaks, guiding them to the leak sensor for leak detection, and passing them on to the next module below, if the leak sensor fails. The leak sensor in the leak plane stops the running system as soon as the leak detection level is reached.

Solvent and condensate is guided through the waste channel into the waste container:

- from the detector's flow cell outlet
- from the Multisampler needle wash port
- from the Sample Thermostat (condensate)
- from the pump's Seal Wash Sensor (if applicable)
- from the pump's Purge Valve or Multipurpose Valve

Installation

Handling Leak and Waste

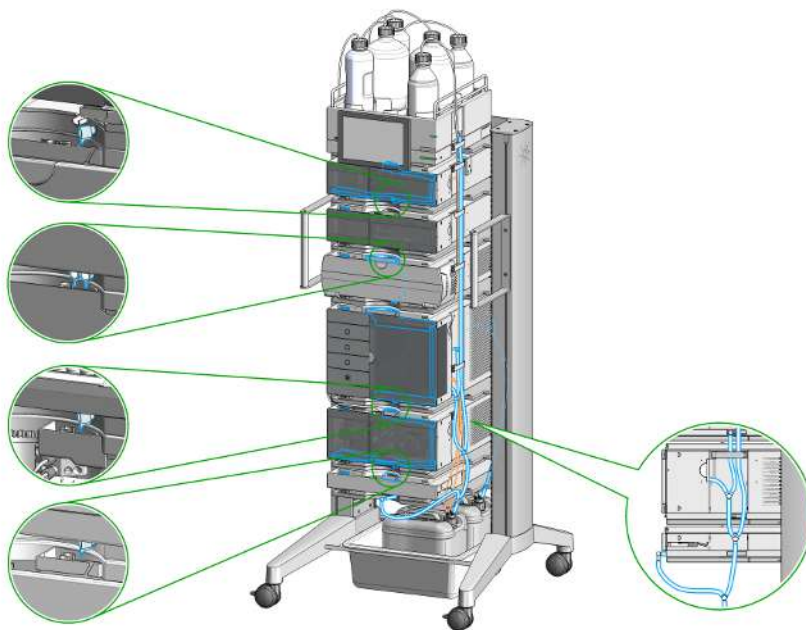


Figure 11: Infinity III Leak Waste Concept (Flex Bench installation)

Installation

Handling Leak and Waste

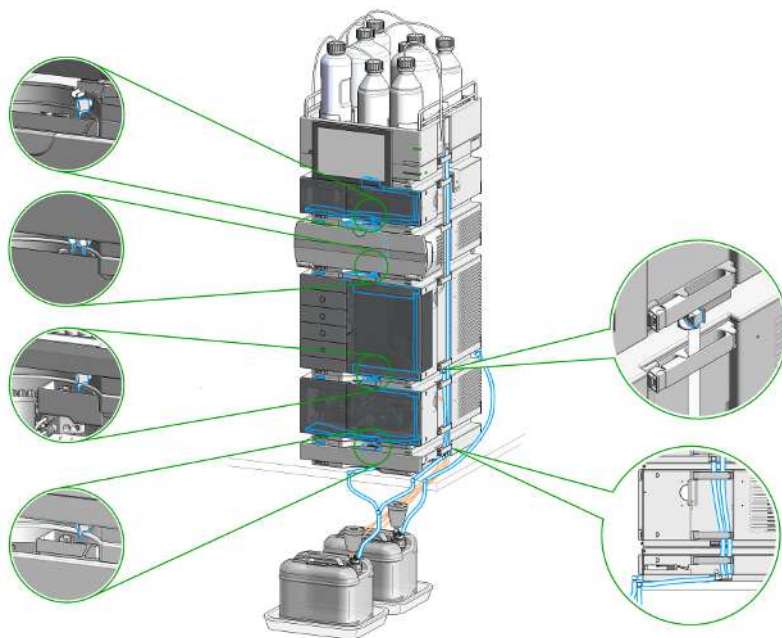


Figure 12: Infinity III Single Stack Leak Waste Concept (bench installation)

Installation

Handling Leak and Waste

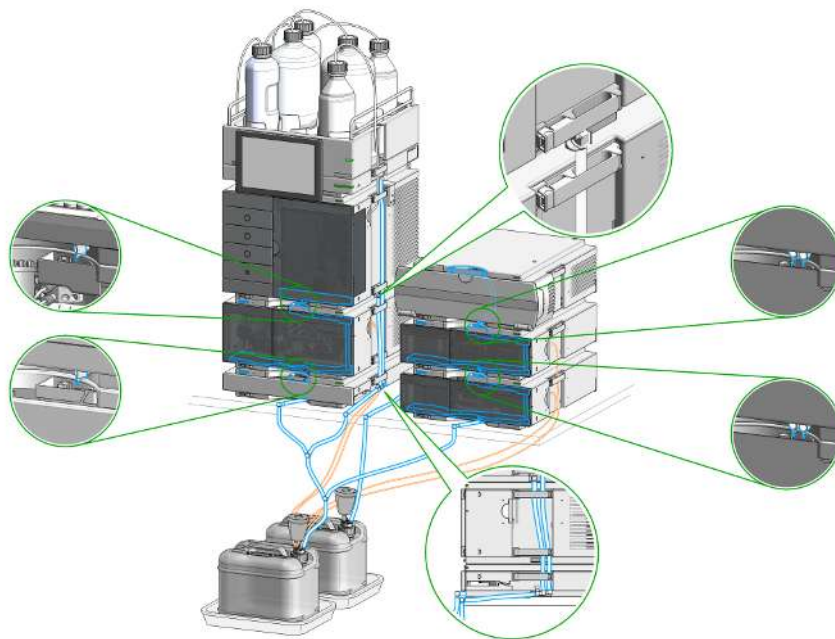


Figure 13: Infinity III Two Stack Leak Waste Concept (bench installation)

The waste tube connected to the leak plane outlet on each of the bottom instruments guides the solvent to a suitable waste container.

Drain Connectors Installation

Drain Connectors have been developed to improve leak drainage for low flow leaks of high viscosity solvents (for example, isopropanol) in Agilent InfinityLab LC Series Systems. Install these parts to modules where they are missing (usually preinstalled).

- Make sure that dripping adapters are correctly installed on each module in the LC stack, excluding lowest module.
- Remove the dripping adapter if it is appeared to be installed on the lowest module in the LC stack and connect waste tube instead.
- Consider 5004-0000 (Drain Connectors Kit) if drain adaptor is missing on some module(s).

For illustration, see [Handling Leak and Waste](#) on page 25.

Parts required

Qty.	p/n	Description
1	 5004-0000	Drain Connectors Kit

Content of Drain Connectors Kit (p/n 5004-0000)

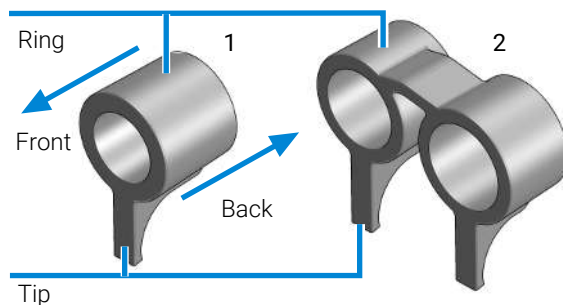


Figure 14: Overview of Drain Connectors: Single (left) and Double (right)



#	Qty.	p/n	Description
Parts can be ordered only as a complete kit.			
1	3	 5043-1834	Single Drain Connector ID3.0-Long
2	1	 5043-1836	Double Drain Connector-Long

Table 3: Compatibility of drain connectors and modules

Drain Connector Type	Compatible Module	Compatible Module Type	
Double	G7116A/B	Column Compartment	
Single	G7114A/B	Detector	
	G7115A		
	G7117A/B/C		
	G7121A/B		
	G7123B		
	G7162A/B		
	G7165A		
	G7129A/B/C		Sampler
	G7167A/B/C		
	G5668A		
	G7137A/B		
	G7157A	Degasser	
	G4767A		
	G7122A		Pump
	G7104A/C		
	G7110B		
	G7111A/B		
	G7112B		
	G7120A		
	G7131A/C		
G7132A			
G5654A			
G4782A			

Prerequisites

- Leak drains of LC modules are clean and free of salt or solvent residuals.

NOTE

Do not install drain connectors on the bottom modules of the stack. Drain outlet of the bottom module has to be connected via waste tubing to a suitable waste container (see Leak and Waste Handling in the manual for a respective module).

NOTE

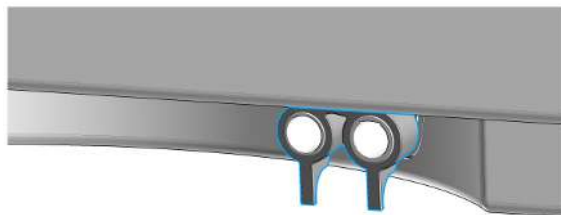
In case of incorrect installation, drain connectors cannot fully perform the intended function.

NOTE

It is not required to power off the HPLC stack to install Single and Double Drain Connectors. The installation of the connectors does not affect the analysis performed during the installation.

**Install the Double Drain Connector on the leak drain of the
1260 Infinity III Multicolumn Thermostat (G7116A)/
1290 Infinity III Multicolumn Thermostat (G7116B)**

- 1 Align the rings with the leak drain outlets of the module, press slightly with the fingers, and slide the connector along the leak drain outlets until it is aligned with the front of the leak drain.

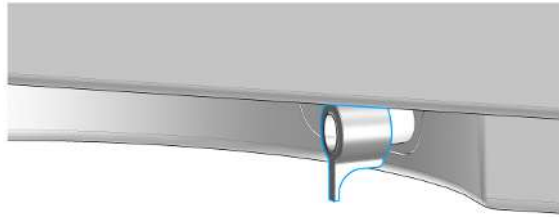


Installation

Handling Leak and Waste

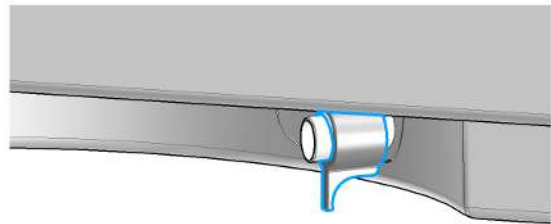
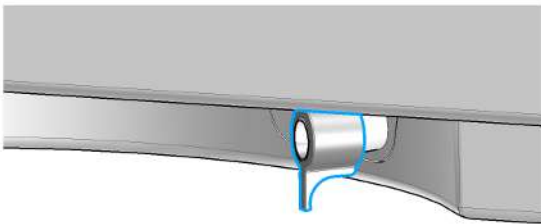
Install Single Drain Connectors on other modules in the LC stack

- 1 Align the ring with the leak drain outlet of the module, press slightly with the fingers, and slide the connector along the leak drain outlet until it is aligned with the front of the leak drain.



Make sure that the following requirements are covered:

- The tip of the drain connector points straight down.
- The leak drain outlets and the drain connectors are aligned properly.

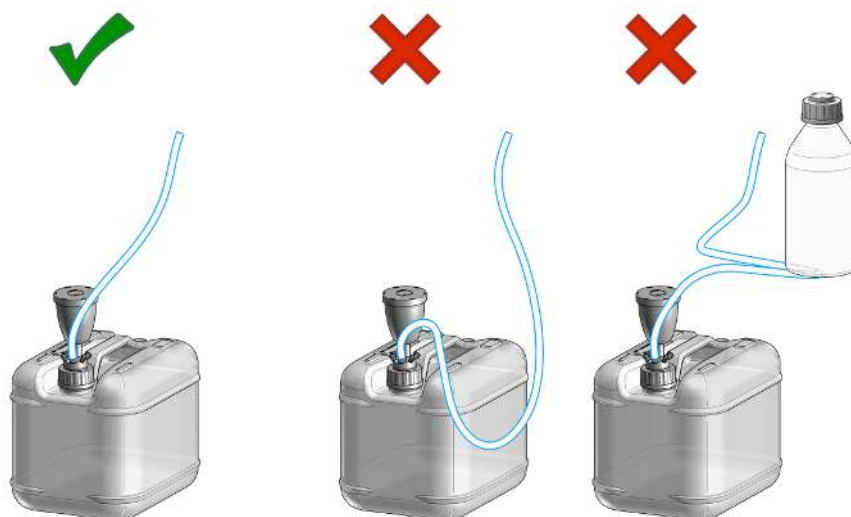


Waste Concept

Agilent recommends using 5043-1221 (6 L waste can with 1 Stay Safe cap GL45 with 4 ports) for optimal and safe waste disposal. If you decide to use your own waste solution, make sure that the tubes don't immerse in the liquid.



Waste Guidance



NOTE

The waste drainage must go straight into the waste containers. The waste flow must not be restricted at bends or joints.

Leak Sensor**CAUTION**

Solvent incompatibility

The solvent DMF (dimethylformamide) leads to corrosion of the leak sensor. The material of the leak sensor, PVDF (polyvinylidene fluoride), is incompatible with DMF.

- Do not use DMF as mobile phase.
- Check the leak sensor regularly for corrosion.
- Do not place metal parts on the leak panel or the leak sensor.



3 Configuration Settings

This chapter describes how to configure the system.

General Information on LAN Configuration 36

Instrument Configuration 37

Lab Advisor 38

Adding a New System 38

Installing Add-ons 41

General Information on LAN Configuration

LAN configuration is executed from the module with direct LAN connection to the controller software. This must be the module (usually the detector) with the highest data rate.

Instrument Configuration

NOTE

If the system in use supports the InfinityLab Assist, follow the instructions provided.

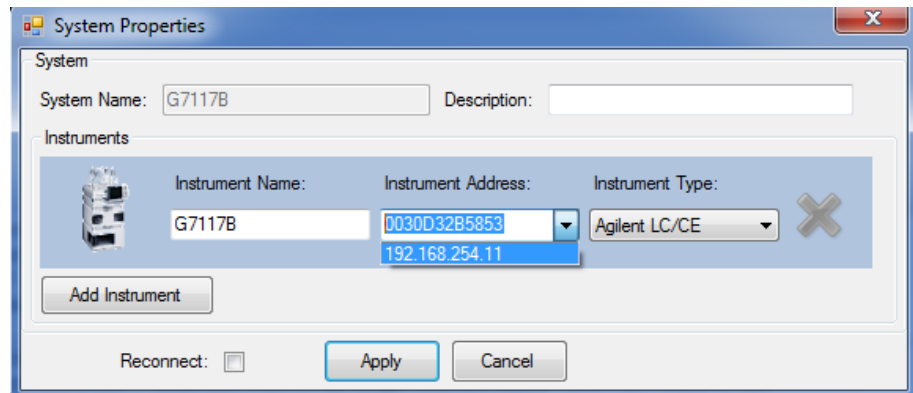
Else use LabAdvisor, or OpenLab CDS.

Example shows an instrument configuration with a Diode Array Detector in LabAdvisor.

- 1 Set the switches of the Configuration switch at the rear of the module:
 - a All switches DOWN: module uses the default IP address 192.168.254.11.



- b Switch 4 UP and others DOWN: module uses DHCP.
 - c Switch 5 UP and others DOWN: modules uses STORED address.
- 2 Enter the setup information (MAC ¹ / IP address and/or Instrument Name).

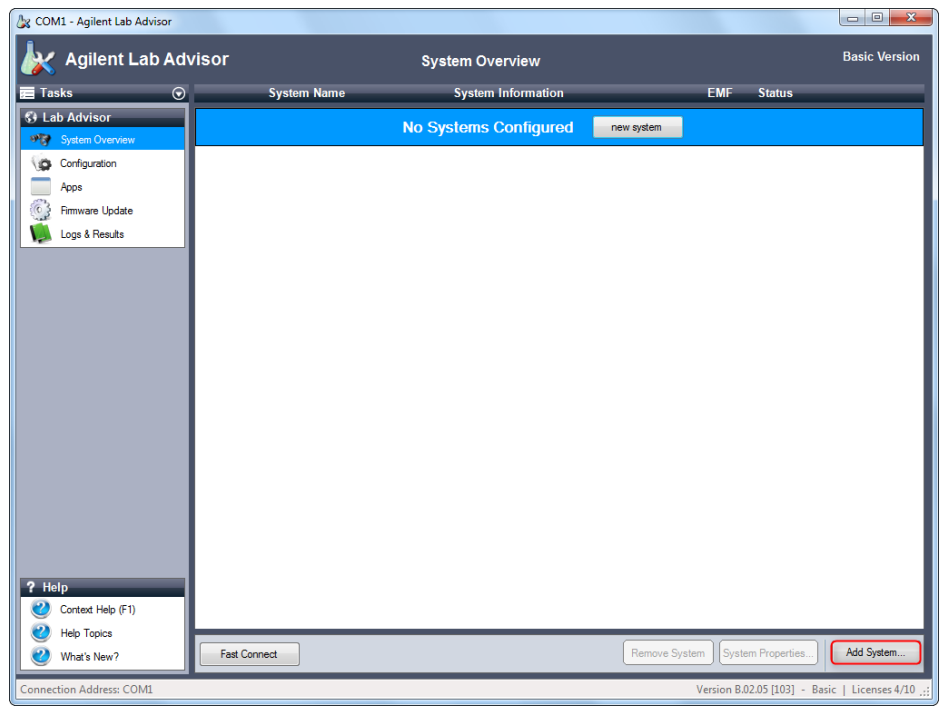


¹ MAC address can only be used in DHCP DIP-switch configuration.

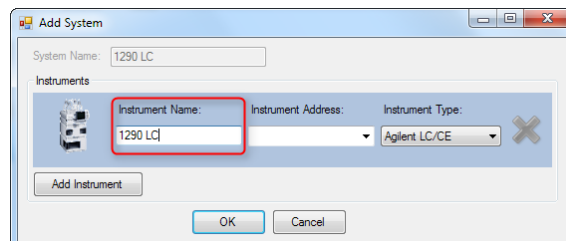
Lab Advisor

Adding a New System

- 1 In the Action Panel of the System Overview, click Add System.



The Add System dialog box is displayed.

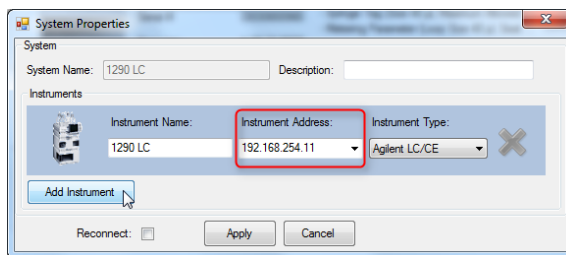


- 2 Enter a name in the **Instrument Name** field.

NOTE

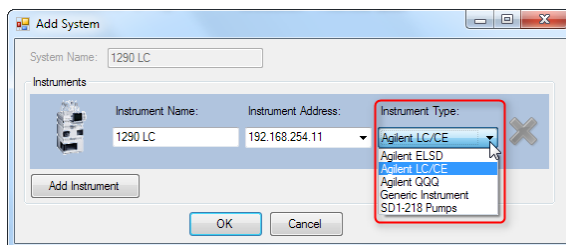
If your system comprises just one instrument, the **Instrument Name** is copied to the **System Name** field.

- 3 Enter the connection details in the **Instrument Address** field.

**NOTE**

The **Instrument Address** can be an IP address, the host name or, if you are connecting using a serial cable, the COM port.

- 4 Click the **Instrument Type** down-arrow and select the type of instrument you are adding from the list. The default setting is **Agilent LC/CE**. Additional instrument types become available when the respective add-ons are installed.

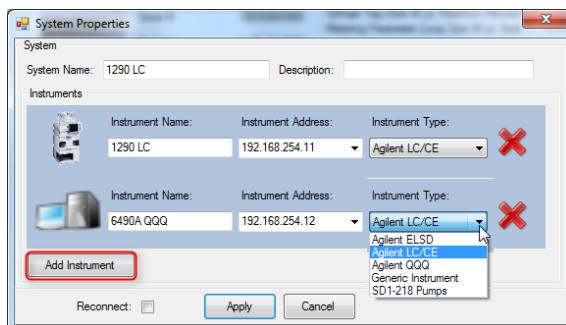
**NOTE**

By default, the **Instrument Type** drop-down list contains only the entry **Agilent LC/CE**. Additional instrument types can be added by installing the respective add-ons (see [Installing Add-ons](#) on page 41).

Configuration Settings

Lab Advisor

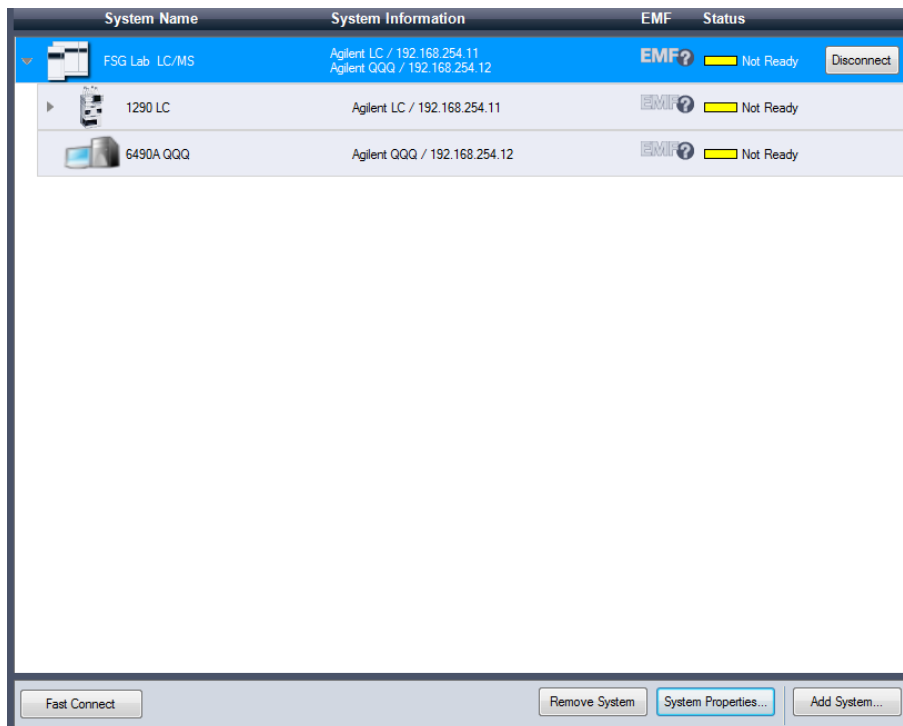
- If your system comprises more than one instrument, click **Add Instrument** and complete the details as above.



NOTE

As soon as you add a second instrument, the **System Name** field is activated to allow you to edit the system name.

- Click **OK** to finish adding the system and close the **Add System** dialog box. The system becomes visible in the **System Overview**, and Lab Advisor tries to connect to it.



Installing Add-ons

Add-ons are installed from the **Configuration** screen, using a Lab Advisor Extension file with the with the extension .LAX.

NOTE

You need Administrator rights in order to install Add-ons.

- 1 In the Global Tasks section of the Navigation Panel, click **Configuration**.
The **Configuration** screen is displayed.
- 2 Click **Add-ons** to navigate to the **Configuration - Add-ons** screen.

Add-ons

Automatically check for updates:

Name	Installed Version	Type	Status
Agilent Lab Advisor	B.02.07 [137]	Main	
Agilent LC/CE	2.4.218.0	Add-on	
Generic Instrument	1.0.11.0	Add-on	
ICoCo	1.0.0.18	Add-on	
Lab Advisor Common Apps	1.1.50.0	App	
Lab Advisor Common Services Apps	1.1.28.0	App	
Lab Advisor Diagnostic Catalog App	1.1.55.0	App	



Agilent Lab Advisor B.02.07 [137]
 Lab Advisor Core

Figure 15: Add-ons in Configuration

Configuration Settings

Lab Advisor

The **Configuration - Add-ons** screen contains a table listing all the Add-ons that are already installed.

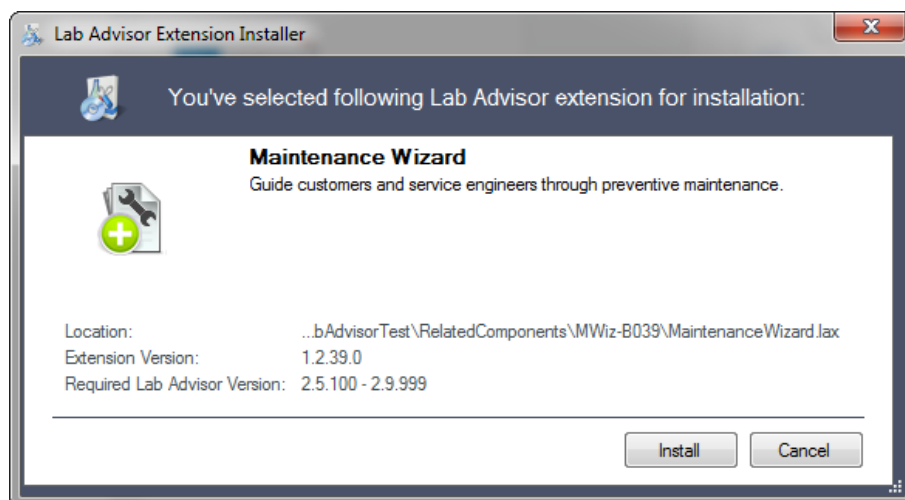
3 Click **Install from .lax file**.

A file selection dialog box is displayed to allow you to select the App or Add-on to install.

4 Navigate to the folder containing the Add-on files, select the .lax file and click **Open** to install the Add-on.

5 Click **Yes** when the request to shut down Lab Advisor appears.

Lab Advisor shuts down and the Add-on installation is started.



When the installation is finished, the newly installed Add-on is included in the table in the **Configuration - Add-ons** screen.



4 Quick Start Guide

This chapter provides information on running an Agilent 1260 Infinity III Prime Bio LC System.

Best Practices 44

Prepare a Run 45

InfinityLab LC Performance Check 55

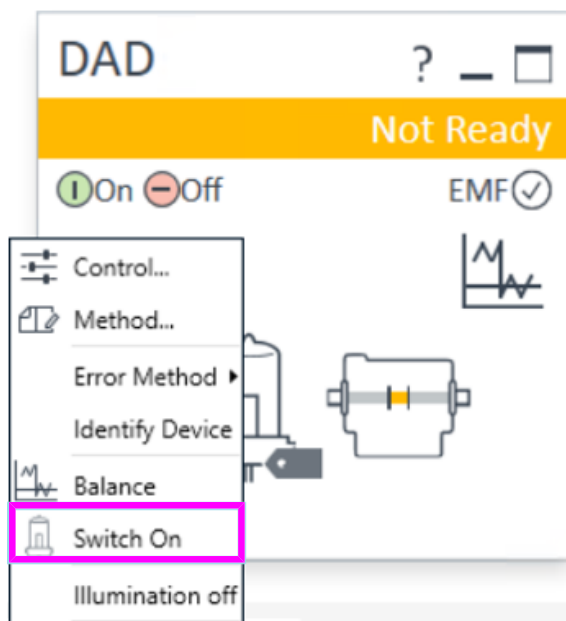
Best Practices

For best practices, refer to the *Agilent Information Center* on Agilent InfinityLab LC Series User Documentation (G4800-64600), Best Practices for Using an Agilent LC System (01200-90090), or the 1290 Infinity II Bio and 1260 Infinity II Prime Bio LC Quick Reference Sheet (G7132-90110).

Prepare a Run

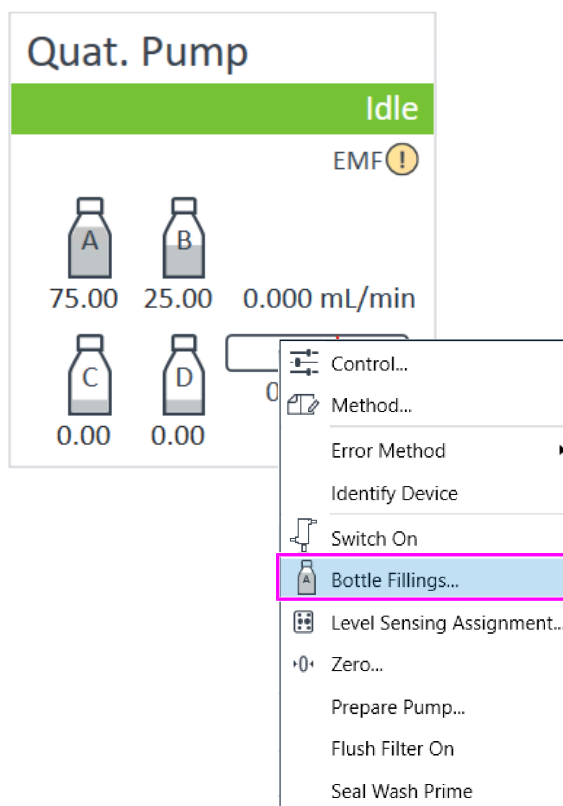
This procedure exemplarily shows how to prepare a run. Parameters as shown in the screenshots may vary, depending on the system installed.

- 1 Switch on the detector.



- 2 Fill the solvent bottles with adequate solvents for your application.
- 3 Place solvent tubings with bottle head assemblies into the solvent bottles.
- 4 Place solvent bottles into the solvent cabinet.

- 5 Solvent bottle filling dialog (in the software).



Solvent Bottle					
Fillings					
	Actual Volume		Total Volume		
A:	<input type="text" value="0.80"/>	liter	<input type="text" value="1.00"/>	liter	
B:	<input type="text" value="0.92"/>	liter	<input type="text" value="1.00"/>	liter	
C:	<input type="text" value="0.78"/>	liter	<input type="text" value="1.00"/>	liter	
D:	<input type="text" value="0.81"/>	liter	<input type="text" value="1.00"/>	liter	

Actions		
<input checked="" type="checkbox"/>	Prevent analysis if level falls below	<input type="text" value="0.05"/> liter
<input type="checkbox"/>	Turn pump off if running out of solvent	

Ok	Cancel	Help
----	--------	------

6 Purge the pump (in normal usage scenario).


OR: Prime the pump (after installation of the system).

NOTE

For details on priming and purging, refer to the technical note *Best Practices for Using an Agilent LC System Technical Note (InfinityLab-BestPractice-en-SD-29000194.pdf, SD-29000194)*.

7 Change solvent (if necessary).

Quat. Pump VWD Sampler DAD Column Comp.

Quat. Pump (G7111B) 

Flow

0.800 mL/min

Solvents

A: 60.0 % Water

B: 40.0 % Acetonitrile

C: 0.0 %

D: 0.0 %

Pressure Limits

Min: 0.00 bar Max: 600.00 bar

Stoptime **Posttime**

As Injector/No Limit Off

10.00 min 1.00 min

Import Timetable...

Advanced

Minimum Stroke

Automatic

20 µL

Compressibility

95 *10⁻⁶/bar

No compensation

Maximum Flow Gradient

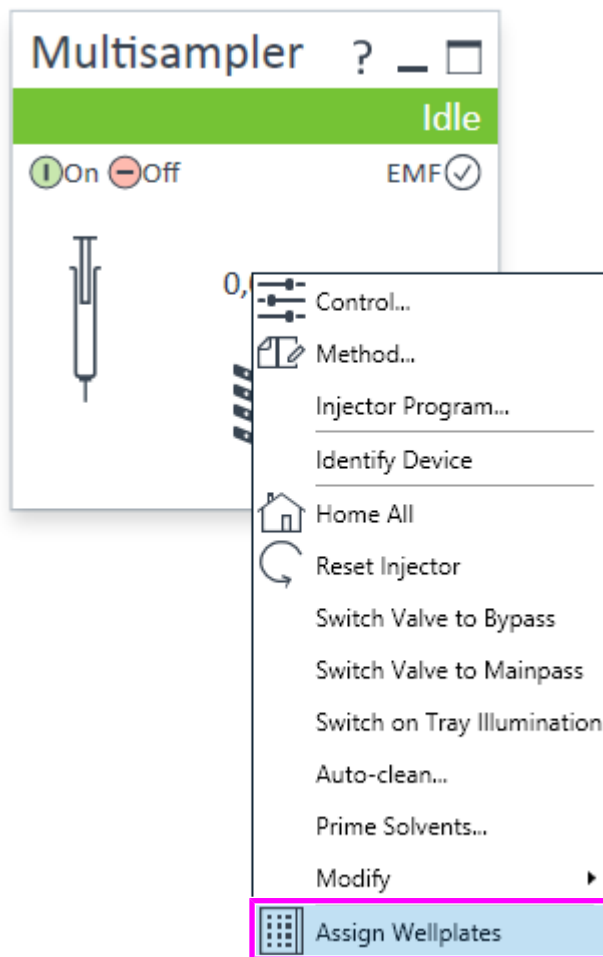
100.000 mL/min²

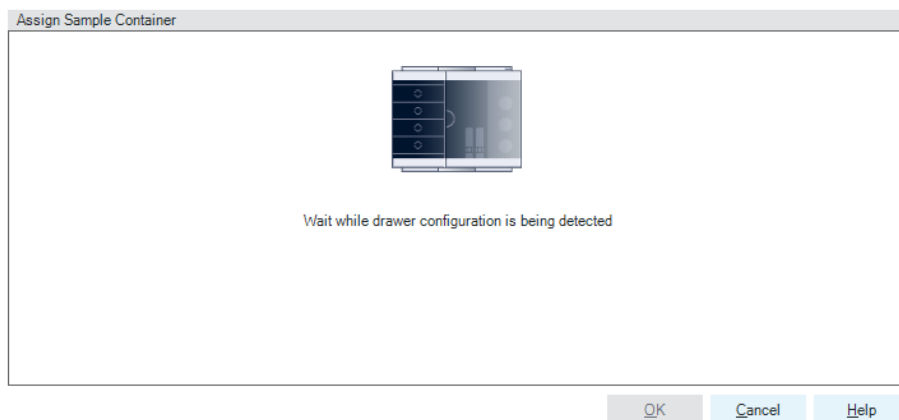
Primary Channel

Automatic

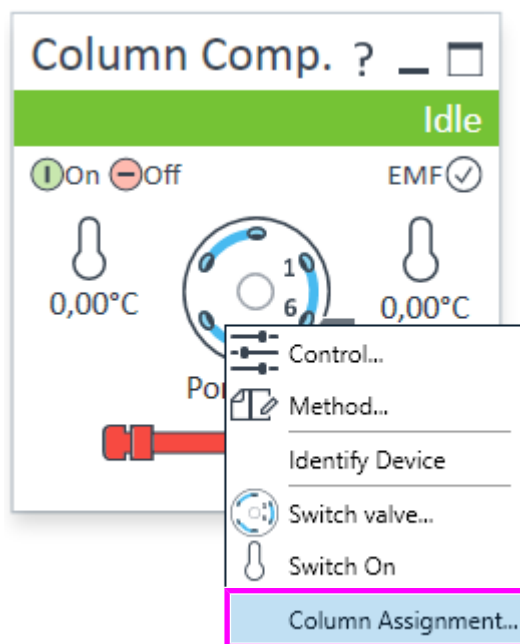
Timetable (1/100 events)

- 8 Choose the tray format of the sampler.





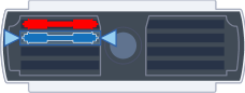
- 9 Add a new column.



Quick Start Guide

Prepare a Run

10 Enter the column information.

Plumbing		Visualization						
Valve Position	Location							
1	Left 1							
2	Left 2							

Valve Type: 2-pos/6-port valve 600 bar (5067-4137)

Column Tag Information								>>
Location	Color Code	Description	Length [mm]	Diameter [mm]	Particle Size [µm]	Max. Pressure [bar]	Injections	
Left 1	Red		0	0,0	0,0	0	0	
▶ Left 2	Blue		0	0,0	0,0	0	0	
Left 3	None		0	0,0	0,0	0	0	
Left 4	None		0	0,0	0,0	0	0	
Right 1	None		0	0,0	0,0	0	0	
Right 2	None		0	0,0	0,0	0	0	
Right 3	None		0	0,0	0,0	0	0	
Right 4	None		0	0,0	0,0	0	0	

Ok/Write Tag Cancel Help

11 Select the column position.

Temperature

Left: Not Controlled 40.0 °C As Detector Cell Unchanged


Right: Not Controlled 25.0 °C As Detector Cell Unchanged Combined

Valve Position/Column

Use Current Column / Position

Use Selected Column / Position

Position 1



Enforce column for run

Stoptime: As Pump/Injector 1.00 min

Positime: Off 1.00 min

Advanced

Enable Analysis

when front door open

Left: With any temperature When temperature is within ± 0.8 °C for 0.0 min

Right: With any temperature When temperature is within ± 0.8 °C for 0.0 min

Valve Position/Column After Run

Do not switch

Switch to position / column at beginning of run

Increase valve position / column

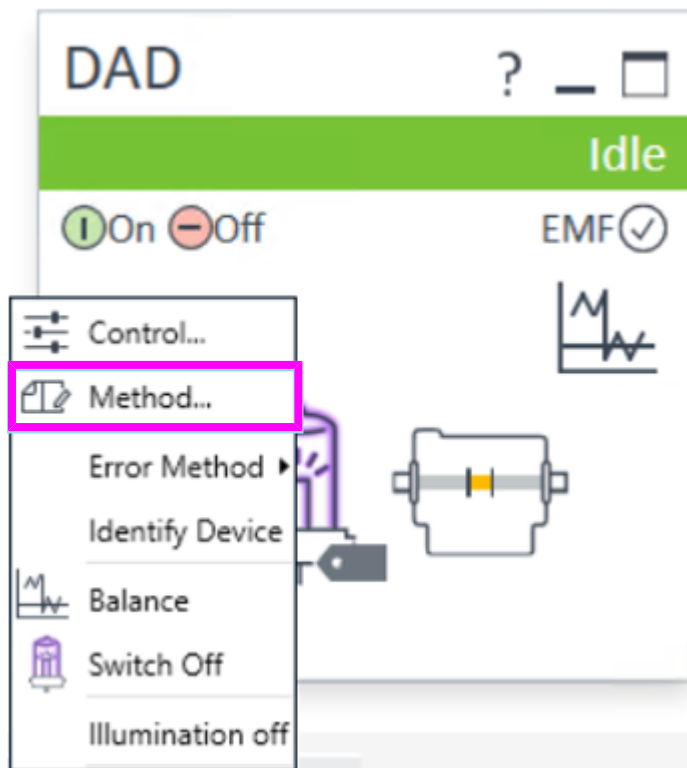
Use valve position / column

Position 1

Timetable (empty)

Ok Apply Cancel


12 Set the detector according to the needs of your method.



Quick Start Guide

Prepare a Run

Quat. Pump | VWD | Sampler | DAD | Column Comp.

DAD (G7115A) 

Signals

Acquire	Wave length	Band width	Reference Wavelength	Reference Bandwidth	
<input checked="" type="checkbox"/>	254	4	<input checked="" type="checkbox"/>	360	100 nm
<input type="checkbox"/>	254	4	<input type="checkbox"/>	360	100 nm
<input type="checkbox"/>	210	4	<input type="checkbox"/>	360	100 nm
<input type="checkbox"/>	230	4	<input type="checkbox"/>	360	100 nm
<input type="checkbox"/>	280	4	<input type="checkbox"/>	360	100 nm
<input type="checkbox"/>	260	4	<input type="checkbox"/>	360	100 nm
<input type="checkbox"/>	270	4	<input type="checkbox"/>	360	100 nm
<input type="checkbox"/>	290	4	<input type="checkbox"/>	360	100 nm

Peakwidth

> 0.0063 min (0.13 s response time) (40 Hz)

Stoptime **Posttime**

As Pump/Injector Off

1.00 min 1.00 min

Advanced

Spectrum

Store: None

Range from: 190 to 400 nm

Step: 2.0 nm

Analog Output

Zero Offset: 5 %

Attenuation: 1000 mAU

Margin for negative Absorbance **Slit**

100 mAU 4 nm

Autobalance **Lamps on required for acquisition**

Prerun UV Lamp

Postrun Vis Lamp

▶ Timetable (empty)

InfinityLab LC Performance Check

The InfinityLab LC Performance Check is run after the complete installation of the module stack to affirm the functionality of all modules and the system. The InfinityLab LC Performance Check confirms that each module performs and is connected correctly.

For more information, refer to Agilent CrossLab Start Up Installation, or Introduction.



5 Parts and Consumables

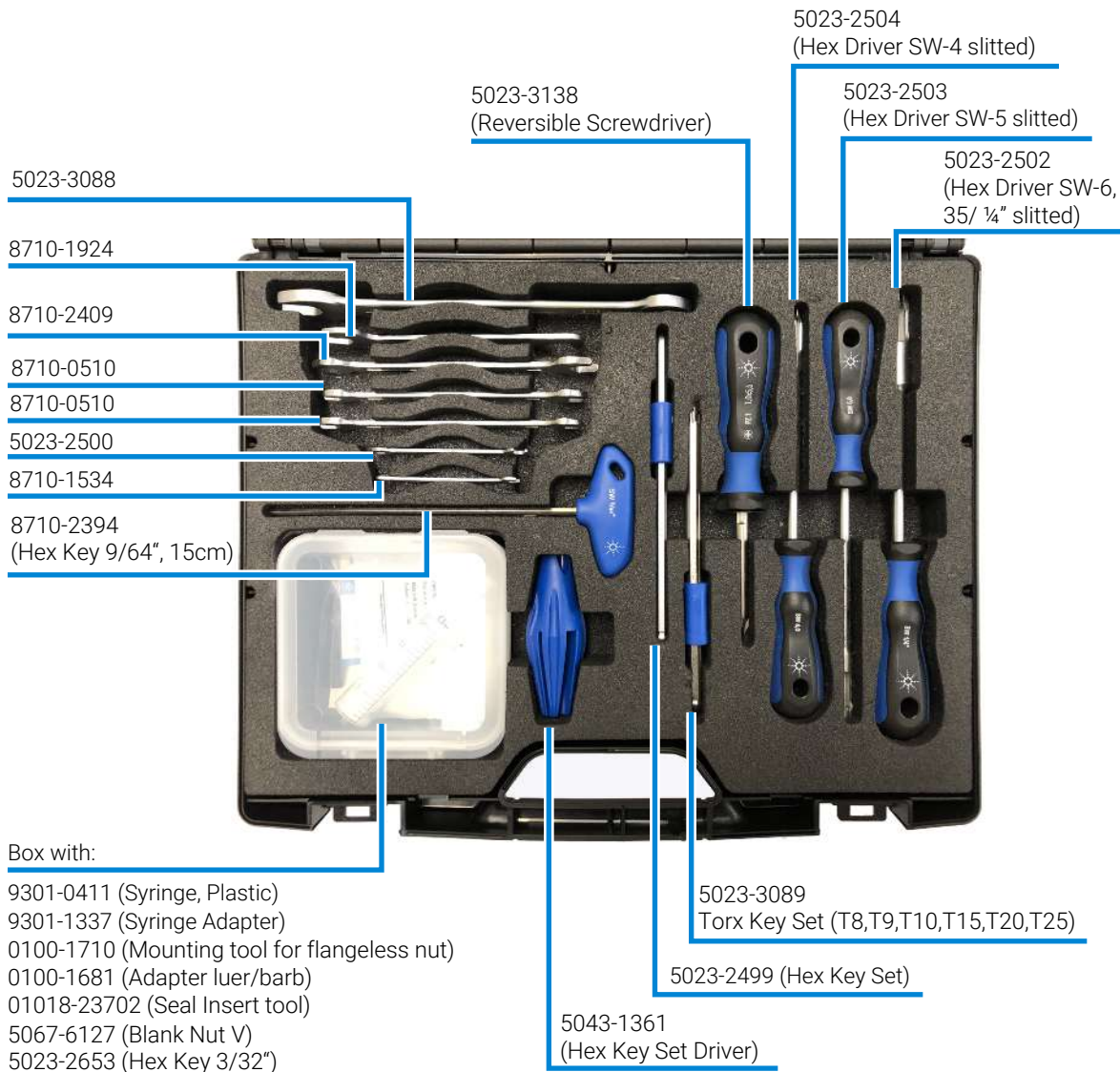
This chapter provides information on additional parts and consumables.

HPLC System Tool Kit 57

Additional Heater Devices 58

Valve Kits 60

HPLC System Tool Kit



Additional Heater Devices



For biocompatible modules use bio / biocompatible parts only!



Do not mix with bio-inert parts.



For bio-inert modules use bio-inert parts only!

Do not mix with bio / biocompatible parts.

Table 4: Heat Exchanger overview

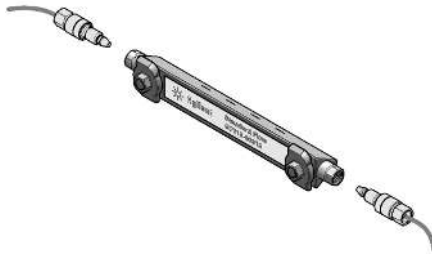
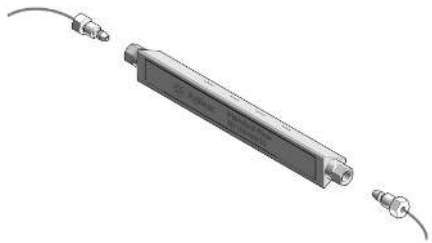

Flow rate	0.075 mm i.d. capillary	0.12 mm i.d. capillary	0.17 mm i.d. capillary
< 2 mL/min	<i>Ultra-low Dispersion</i> G7116-60021 (Internal volume: 1.0 µL)	<i>Standard Flow</i> G7116-60015 (Internal volume: 1.6 µL)	<i>Large ID</i> G7116-60051 (Internal volume: 3.0 µL)
> 2 mL/min		<i>High Flow</i> G7116-60031 (Internal volume: 3.0 µL)	<i>Large ID High Flow</i> G7116-60061 (Internal volume: 6.0 µL)
	 Bio, all flow rates	<i>Bio Ultra-low Dispersion</i> G7116-60091 (Internal volume: 1.0 µL)	<i>Bio Standard Flow</i> G7116-60071 (Internal volume: 1.6 µL) <i>Bio High Flow</i> G7116-60081 (Internal volume: 3.0 µL)
	 Bio-inert, all flow rates		<i>Bio-inert</i> G7116-60041 (Internal volume: 9.0 µL)

Quick Connect Heat Exchangers with 0.12 mm and 0.075 mm i.d. capillary are suitable for G7116B. Quick Connect Heat Exchangers with 0.17 mm i.d. are suitable for G7116A.

Parts and Consumables

Additional Heater Devices

Table 5: InfinityLab Quick Connect Heat Exchangers

Item	Description
 <p>The image shows a cylindrical metal heat exchanger with two twisted metal clips on its ends. A thin tube is attached to the left clip, and another thin tube is attached to the right clip. The device is oriented horizontally.</p>	<p>Old design Quick Connect Heat Exchanger: twist lock clips of the Quick Connect Heat Exchanger are used to secure the Quick Connect Heat Exchanger in the heater block of the MCT.</p>
 <p>The image shows a rectangular metal heat exchanger with a textured surface. It has a thin tube attached to the left end and another thin tube attached to the right end. The device is oriented horizontally.</p>	<p>New design Quick Connect Heat Exchanger: column holders (lamella type G7116-68003 or clamp type G7116-68004) are used to secure the Quick Connect Heat Exchanger in the heater block of the MCT. G7116-68003 lamella type column holders are delivered as a part of the Quick Connect Heat Exchanger and do not need to be ordered separately.</p>
 <p>The image shows a cylindrical metal heat exchanger with a thin tube extending from the left end. The device is oriented horizontally.</p>	<p>Design has been changed for all Quick Connect Heat Exchangers except G7116-60041, Quick Connect Heat Exchanger Bio-inert.</p>

Valve Kits



For biocompatible modules use bio / biocompatible parts only!

Do not mix with bio-inert parts.

G5641A 2-position/10-port valve bio 1300 bar

Table 6: G5641A 2-position/10-port valve bio 1300 bar

Description	Amount	Unit	Comment
5067-6682 (2-position/10-port bio valve head, 1300 bar)	1	ea	
5013-0002 (Bio 2/10 Capillary Kit)	1	ea	

G4235A Solvent Selection Valve Head, Bio-inert - Stand Alone Valve

Table 7: G4235A Solvent Selection Valve Head, Bio-inert - Stand Alone Valve

Description	Amount	Unit	Comment
5067-4159 (12-position/13-port selector valve head, 210 bar, bio-inert)	1	ea	
5067-4601 (Solvent selection tubing kit, 4 solvents)	up to 4	ea	optional

In This Book

This manual contains technical reference information about the Agilent 1260 Infinity III Prime Bio LC System.

The manual describes the following:

- introduction,
- install the modules,
- configuration settings,
- quick start guide,
- parts and consumables.

www.agilent.com

© Agilent Technologies Inc. 2021-2025
Edition: 09/2025

Document No: D0006222 Rev. B.01

