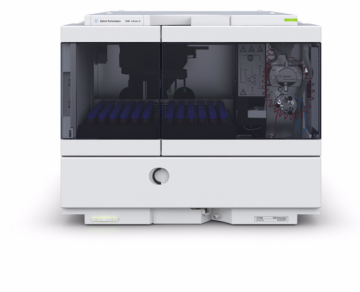
Agilent 1290 Infinity II Vialsampler

Data Sheet



Product Description

The Agilent 1290 Infinity II Vialsampler is designed for UHPLC applications up to 1300 bar. It provides the reliability, safety, and ease-of-use needed for routine pharmaceutical tasks and quality control, as well as for environmental and food analyses. It can house optionally the integrated column compartment for two LC columns with temperature control up to 80 °C as well as a sample cooler for stable temperatures down to 4 °C, all within one module.

Features

- Accurate and precise injections within a wide and flexible range of volumes
- Capacity for up to 132 vials (2 mL) or up to 36 vials (6 mL)
- Easy adaption for injection volumes up to 1500 µL for applications ranging from microbore to semipreparative chromatography
- Includes a needle flush port for rinsing of outside needle to maintain lowest carryover during routine work
- Integrated column compartment as option or upgrade available, holding two columns up to 30 cm length, and providing heating capacity up to 80 °C for reproducible chromatography data at optimized resolution
- Low internal volume for the minimum contribution to a system's total internal volume, which can be even further reduced using "bypass" mode
- Overlapped injections for increased productivity
- Injection program available for customizing advanced injections as well as for sample preparation steps upfront injection

Specifications

Table 1 Physical Specifications

Type	Specification	Comments
Weight	19 kg (41.9 lbs)	w/o sample cooler
Dimensions (height × width × depth)	324 x 396 x 468 mm (12.8 x 15.6 x 18.4 inches)	
Line voltage	100 – 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	350 VA / 350 W / 1195 BTU/h	
Ambient operating temperature	4 - 40 °C (39 - 104 °F), without chiller up to 55 °C (131 °F)	
Ambient non-operating temperature	-40 – 70 °C (-40 – 158 °F)	
Humidity	< 95 % r.h. at 40 °C (104 °F)[1]	Non-condensing
Operating altitude	Up to 3000 m (9842 ft)	
Non-operating altitude	Up to 4600 m (15092 ft)	For storing the module
Safety standards: IEC, CSA, UL	Installation category II, Pollution degree 2	For indoor use only.
ISM Classification	ISM Group 1 Class B	According to CISPR 11

[1] If a sample cooler is included the upper value for humidity can be reduced. Please check your lab conditions to stay beyond dew point values for non–condensing operation.

Table 2 Performance Specifications (G7129B)

Type	Specification	Comment
Injection range	0.1 – 20 µL in 0.1 µL increments (default) 0.1 – 40 µL in 0.1 µL increments if 40 µL loop is installed 0.1 – 120 µL in 0.1 µL increments with 1290 Infinity large volume injection kit (hardware modification required) 0.1 – 100 µL in 0.1 µL (if 100 µL-loop and 100 µL-head is installed)	Up to 1500 µL with 1400 µL-multi-draw kit and 100 µL-analytical head up to 130 MPa (1300 bar, 18854 psi) up to 60 MPa (600 bar, 8702 psi)
Precision	<0.25 % RSD of peak areas from 5 µL to 100 µL	Measured caffeine
Pressure range	Up to 130 MPa (1300 bar, 18854 psi)	
Sample viscosity range	0.2 – 5 cp	
Sample capacity	132 x 2 mL vial (two trays default) 100 x 2 mL vial (two classic trays optional) 36 x 6 mL vials (two trays optional)	

Carry over	<0.004 % (40 ppm) with needle wash	Using the following conditions:
		• ZORBAX Eclipse Plus C18, RRHD, 2.1 x 50 mm, 1.8 µm (959757-902)
		• Mobile Phase:
		  ◦ A: 0.1 % TFA in water
		  ◦ B: 0.1 % TFA in acetonitrile
		• Isocratic : % B=33 %
		• Flow rate: 0.5 mL/min
		• Column temperature: 50 °C
		• Wavelength detection: 257/4 nm, ref. wavelength 380/100 nm, 20 Hz
		• Injection volume: 1 µL
		• Sample: 1200 ng/µL Chlorhexidine for UV, (dissolved with mobile phase A), 1 µL injected and measured both on Agilent G7117B DAD
		• Wash solution: H_2O with 0.1 % TFA (5 s)

Injection cycle time	18 s for draw speed 200 µL/min Ejection speed: 200 µL/min Injection volume: 1 µL	

Table 2 Performance Specifications (G7129B)

Type	Specification	Comment
Minimum sample volume	1 µL from 5 µL sample in 100 µL microvial, or 1 µL from 10 µL sample in 300 µL microvial.	Needle height offset has to be adapted to ensure that needle doesn't touch vial bottom. Default needle height = 0 equates to 2 mm above the vial bottom.
Control and data evaluation	Agilent Open Lab CDS Mass hunter QQQ Mass hunter TOF/QTOF Lab Advisor ICF for 3rd party SW control LC and CE Drivers	A.02.02 or above B.08.01 or above B.07.02 or above B.02.07 or above A.02.04 or above A.02.12 or above
Local control	Agilent Instant Pilot (G4208A)	B.02.17 or above
Communications	Controller-area network (CAN),Local Area Network (LAN) ERI: ready, start, stop and shut-down signals	
Safety and maintenance	Extensive support for troubleshooting and maintenance is provided by the Instant Pilot, Agilent Lab Advisor, and the Chromatography Data System. Safety-related features are leak detection, safe leak handling, leak output signal for shutdown of pumping system, and low voltages in major maintenance areas.	
GLP features	Early maintenance feedback (EMF) for continuous tracking of instrument usage with user-settable limits and feedback messages. Electronic records of maintenance and errors.	
Housing	All materials recyclable.	
Metering device	Metering device in high pressure flow path	

Ordering Details

Table 3 1290 Infinity II Vialsampler Ordering Details

Description	Part Number
Agilent 1290 Infinity II Vialsampler UHPLC design autosampler up to 1300 bar for 0.1 – 20 µL injections. Includes two drawers, each 66 sample vials (2 mL) 132 vials total capacity, standard needle flush port and peristaltic pump. Default setup with 20 µL loop and 40 µL analytical head.	G7129B
Agilent Infinity II Sample Cooler Agilent Infinity II Sample Cooler is a cooling unit to fit G7167A/B samplers as well as G7129A/B samplers. Slide-in device, customer installable.	G7129B #100
Integrated column compartment, 3.0 µL heater Integrated column compartment for up to two columns with 3 µL heater volume, for standard analytical flow rates up to 5 mL/min. Recommended for standard flow rates.	G7129B #063
Integrated column compartment, 6.0 µL heater Integrated column compartment for up to two columns with 6 µL heater volume, for standard analytical flow rates up to 5 mL/min Recommended for high flow rates.	G7129B #066
6 mL vial drawer (3x6 positions), 1 drawer/pack Each drawer can hold 18 x 6 mL vials. Samples are set up in a A1 to C6 format (microtiter-plate style).	G7129B #011
Classic drawer kit (10x10 positions split in 2 drawers) Kit of 2 drawers to hold 100x 2 mL vials. Samples are set up in a 1-to-100 format (classic Agilent vial sampler style)	G7129B #012
Analytical head 100 µL 100 µL analytical head for use at up to 600 bar system pressure	G7129B #161
Sample loop 40 µL Sample loop 40 µL for max 40 µL injection	G7129B #150
Sample loop 100 µL Sample loop 100 µL for max 100 µL injection (600 bar)	G7129B #152
Multidraw option adding 80 µL Includes seat capillary to inject up to 120 µL volume.	G7129B #022
Walkup extension: external tray External tray offering 5 vial positions (2 mL) and 1 vial disposal position	G7129-60000
Walkup extension: vial disposal tube Disposal tube to fit on vial disposal position	G1313-27302

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