

# **Agilent 1260 Infinity II Vialsampler**

Data Sheet

### **Product Description**



The Agilent 1260 Infinity II Vialsampler is an autosampler designed for the reliability 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 thermostat for stable temperatures from 4 °C to 40 °C, all within one module.

### **Features**

- High capacity up to 132 vials (2 mL) or up to 36 vials (6 mL).
- **Reliable injections** 0.1 to 100 µL injections for up to 600 bar (G7129A) and up to 800 bar (G7129C).
- **Easy volume extensions** for injection volumes up to 1800 µL for applications ranging from microbore to semipreparative chromatography.
- Lowest carryover with an in needle flush port included, for rinsing the outside of the needle.
- Efficient temperature control with an integrated column compartment as option or upgrade available. Which holds two columns up to 30 cm length, and provides heating capacity from 5 °C above ambient up to 80 °C for reproducible chromatography data at optimized resolution.
- Integrated sample thermostat available as option or upgrade, providing cooling and heating in the range from 4 °C 40 °C.
- Low internal volume for minimum contribution to a system's total internal volume, which can be even further reduced using "bypass" mode.
- Increased productivity with overlapped injections.
- **Customizable injection program** available for customizing advanced injections as well as for sample preparation steps upfront injection.



# **Specifications**

Туре	Specification	Comments
Weight	19 kg (41.9 lbs)	w/o sample thermostat
Dimensions (height × width × depth)	320 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 sample thermostat 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) <sup>1</sup>	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, EN, CSA, UL	Installation category II, Pollution degree 2	For indoor use only
ISM Classification	ISM Group 1 Class B	According to CISPR 11
Permitted solvents	Auto-ignition temperature ≥200 °C Boiling point ≥56 °C	

<sup>1</sup> If a sample thermostat 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.

Туре	Specification
Injection range	$0.1-100~\mu L$ in 0.1 $\mu L$ increments with 100 $\mu L$ up to 60 MPa 0.1 $-$ 900 $\mu L$ in 0.1 $\mu L$ increments with 900 $\mu L$ up to 40 MPa
Injection Precision	<0.25 % RSD of peak areas from 5 $\mu L$ to 100 $\mu L$
Pressure range	0 – 60 MPa (0 – 600 bar, 0 – 8702 psi) 0 – 40 MPa (0 – 400 bar, 0 – 5801 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
Injection cycle time	18 s for draw speed 200 μL/min Ejection speed: 200 μL/min Injection volume: 1 μL
Minimum sample volume	1 μL from 5 μL sample in 100 μL microvial, or 1 μL from 10 μL sample in 300 μL microvial.
Instrument Control	LC & CE Drivers A.02.12 or above Instrument Control Framework (ICF) A.02.03 or above Instant Pilot (G4208A) with firmware B.02.19 or above Lab Advisor B.02.07 or above
Communications	Controller-area network (CAN),Local Area Network (LAN) ERI: ready, start, stop and shut-down signals
Maintenance and safety-related features	Extensive diagnostics, error detection and display with Agilent Lab Advisor software 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.

 Table 2
 Performance Specifications 1260 Infinity II Vialsampler (G7129A)

Туре	Specification	
Injection range	$0.1-100~\mu L$ in 0.1 $\mu L$ increments with 100 $\mu L$ up to 80 MPa	
Injection precision	<0.25 % RSD of peak areas from 5 $\mu L$ to 100 $\mu L$	
Pressure range	0 – 80 MPa (0 – 800 bar, 0 – 11603 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	
Injection cycle time	18 s for draw speed 200 μL/min Ejection speed: 200 μL/min Injection volume: 1 μL	
Minimum sample volume	1 μL from 5 μL sample in 100 μL microvial, or 1 μL from 10 μL sample in 300 μL microvial.	
Instrument Control	LC & CE Drivers A.02.17 or above Instrument Control Framework (ICF) A.02.05 or above Instant Pilot (G4208A) with firmware B.02.22 or above InfinityLab LC Companion (G7108A) Lab Advisor B.02.10 or above	
Communications	Controller-area network (CAN),Local Area Network (LAN) ERI: ready, start, stop and shut-down signals	
Maintenance and safety-related features	Extensive diagnostics, error detection and display with Agilent Lab Advisor software 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.	

 Table 3
 Performance Specifications 1260 Infinity II Vialsampler (G7129C)

Table 4	Physical Specifications of the Sample Thermostat
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Туре	Specification	Comment
Weight	<6 kg	
Dimensions (height x width x depth)	205 mm x 340 mm x 370 mm	
Refrigerant gas	R600a (0.030 kg)	Ozone depletion potential (ODP) =0 Global warming potential (GWP) =3
Supply voltage	24VDC	
Current	10 A max.	
Ambient operating temperature	4-40 °C (39.2-104 °F)	
Ambient non-operating temperature	-40 - 70 °C (-40 - 158 °F)	
Humidity	< 95 % r.h. at 40 °C (104 °F)	Non-condensing
Operating altitude	Up to 3000 m (9842 ft)	
Non-operating altitude	Up to 4600 m (15091 ft)	
Safety standards: IEC, EN, CSA, UL	Installation category II, Pollution degree 2	For indoor use only
ISM Classification	ISM Group 1 Class B	According to CISPR 11

 Table 5
 Performance Specifications for the Sample Thermostat

Туре	Specifications	
Operating principle	High performance, low-energy consumption micro-compressor based cooler with natural R600a coolant (Butane 30 g), user-upgradable	
Temperature range	from 4 – 40 °C	
Temperature settable	from 4 – 40 °C in 1 ° increments	
Temperature accuracy (<25 °C, <50 % r.H.)	2 – 6 °C at a setpoint of 4 °C	

# **Ordering Details**

### Table 6 Ordering Details 1260 Infinity II Vialsampler

Description	Part Number
<b>Agilent 1260 Infinity II Vialsampler</b> UHPLC design autosampler up to 800 bar for 0.1 – 100 μL injections. Standard needle flush port and peristaltic pump. Default setup with 100 μL loop and 100 μL analytical head.	G7129C
Drawer choice 6 x 11 vials (2 mL), 2 drawers included	G7129C #010
Drawer choice 3x 6 vials (6 mL), 2 drawers included	G7129C #011
Drawer choice 5x 10 vials (2 mL), 2 drawers included	G7129C #012
<b>Extended injection range option</b> 900 μL analytical head and sample loop for large single-stroke injections (400 bar pressure limit)	G7129C #020
InfinityLab Sample Thermostat Thermostat unit to fit G7167A/B samplers as well as G7129 A/B/C samplers. Slide-in unit, customer installable.	G7129C #101
InfinityLab Sample Thermostat Upgrade Slide-in thermostat for existing Multisampler instruments. Customer installable. Requires FW 7.22 or higher.	G4761A
Integrated column compartment 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 lowest dispersion and filtered samples	G7129C #063
Integrated column compartment 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 robust routine analysis	G7129C #066
<b>2 mL Vial Drawer (6x11 positions)</b> Each drawer can hold 66 x 2 mL vials. Samples are set up in an A1 to F11 format (microtiter-plate style). 2 drawers/pack.	G7129C #010
<b>6 mL vial drawer (3x6 positions)</b> Each drawer can hold 18 x 6 mL vials. Samples are set up in a A1 to C6 format (microtiter-plate style). 1 drawer/pack.	G7129C #011
<b>Classic drawer kit (10x10 positions split in 2 drawers)</b> 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).	G7129C #012
<b>Analytical head 40 μL</b> 40 μL analytical head, 800 bar pressure limit.	G7129C #162
<b>Sample loop 40 μL</b> Sample loop 40 μL, for maximum 40 μL injection, 800 bar pressure limit.	G7129C #150

#### Table 6 Ordering Details 1260 Infinity II Vialsampler

Description	Part Number
<b>Sample loop 20 μL</b> Sample loop 20 μL for maximum 20 μL injection, 800 bar pressure limit.	G7129C #148
Multidraw option adding 400 $\mu L$ / 1400 $\mu L$ Includes two seat capillary extensions to inject up to 500 or up to 1500 $\mu L$ volume.	G7129C #021
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

### Table 7 Ordering Details 1260 Infinity II Vialsampler

Description	Part Number
<b>Agilent 1260 Infinity II Vialsampler</b> UHPLC design autosampler up to 600 bar for 0.1 – 100 μL injections. Includes two drawers, each with capacity for 66 sample vials (2 mL), 132 vials total capacity. Standard needle flush port and peristaltic pump. Default setup with 100 μL loop and 100 μL analytical head.	G7129A
<b>Extended injection range option</b> 900 μL analytical head and sample loop for large single-stroke injections (400 bar pressure limit)	G7129A #020
InfinityLab Sample Thermostat Thermostat unit to fit G7167A/B samplers as well as G7129 A/B/C samplers. Slide-in unit, customer installable.	G7129A #101
<b>InfinityLab Sample Thermostat Upgrade</b> Slide-in thermostat for existing Multisampler instruments. Customer installable. <i>Requires FW 7.22 or higher</i>	G4761A
<b>Integrated column compartment</b> Integrated column compartment for up to two columns with 3 µL heater volume, with 0.12 mm capillaries optimized for highest chromatographic performance. Recommended for standard flow rates up to 3 mL/min and filtered samples.	G7129A #063
Integrated column compartment Integrated column compartment for up to two columns with 6 μL heater volume, with 0.17 mm capillaries for standard analytical flow rates up to 5 mL/min and higher. Recommended for robust routine analysis.	G7129A #066
<b>6 mL vial drawer (3x6 positions)</b> Each drawer can hold 18 x 6 mL vials. Samples are set up in a A1 to C6 format (microtiter-plate style). 1 drawer/pack.	G7129A #011
<b>Classic drawer kit (10x10 positions split in 2 drawers)</b> Kit of 2 drawers to hold 100x 2 mL vials. Samples are set up in a 1-100 format (classic Agilent vial sampler style).	G7129A #012
<b>Analytical head 40 μL</b> 40 μL analytical head, 600 bar pressure limit.	G7129A #162
<b>Sample loop 40 μL</b> Sample loop 40 μL, for maximum 40 μL injection, 600 bar pressure limit.	G7129A #150
<b>Sample loop 20 μL</b> Sample loop 20 μL for maximum 20 μL injection, 600 bar pressure limit.	G7129A #148
<b>Multidraw option adding 400 μL / 1400 μL</b> Includes two seat capillary extensions to inject up to 500 or up to 1500 μL volume.	G7129A #021

#### Table 7 Ordering Details 1260 Infinity II Vialsampler

Description	Part Number
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

www.agilent.com/chem/infinitylab-lc-series

This information is subject to change without notice.

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