Agilent 1260 Infinity II Flexible Pump (G7104C)

Agilent 1260 Infinity II Flexible Pump (G7104C)

Physical Specifications

Table 3 Physical Specifications G7104C

Туре	Specification	Comments
Weight	16.1 kg (35.5 lbs)	
Dimensions (height × width × depth)	180 x 396 x 436 mm (7.1 x 15.6 x 17.2 inches)	
Line voltage	100 - 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	120 VA / 110 W	
Ambient operating tempera- ture	4 – 55 °C (39 – 131 °F)	
Ambient non-operating tem- perature	-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)	
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

Agilent 1260 Infinity II Flexible Pump (G7104C)

Performance Specifications

Table 4 Performance Specifications G7104C

Туре	Specification	Comments
Hydraulic system	Dual pistons in series pump with pro- prietary servo-controlled variable stroke design and smooth motion control for active damping.	
Pump resolution step size	300 pL	
Flow range	Settable: 0.001 – 5 mL/min	in 0.001 mL/min increments
Flow precision	≤ 0.07 % RSD or 0.01 min SD, which- ever is greater	
Flow accuracy	±1 % or ±10 μL/min, whichever is greater	Pumping degassed H ₂ O
Pressure operating range	Up to 80 MPa (800 bar, 11603 psi) up to 5 mL/min	
Pressure pulsation	< 1 % amplitude or < 0.5 MPa (5 bar), whichever is greater	
Compressibility com- pensation	Automatic	When using "Solvent Types" in method
Recommended pH-range	1.0 - 12.5	Solvents with pH <2.3 should not contain acids which attack stainless steel
Gradient formation	Low pressure quaternary mixing/gra- dient capability using proprietary high-speed proportioning valve	
Delay volume	\leq 350 µL (default configuration)	Measured with water at 1 mL/min (water/water with tracer)
Composition range	Settable range: 0 – 100 % Recommended range: 1 – 99 %	
Composition precision	< 0.15 % RSD or 0.02 min SD, which- ever is greater	
Composition accuracy	±0.4 % absolute	At 1 mL/min for water/water with tracer
Number of solvents	4	

Pumps Agilent 1260 Infinity II Flexible Pump (G7104C)

Table 4	Performance Specifications	G7104C

Туре	Specification	Comments
Solvent selection valve	Internal 4-solvent gradient formation valve included. External 2 x 12 solvent valve as option, fully integrated in the pump control interface.	
Integrated degassing unit	Number of channels: 4, Internal volume per channel: 1.5 mL	
Materials in contact with solvent	TFE/PDD copolymer, FEP, PEEK, PPS, stainless steel, polyimide, ceramic, HMWPE	
Automatic purge valve	Enables automatic software-embed- ded functionalities such as switching the optional mixer in and out or auto- matic purging.	
Active seal wash	Included	
Intelligent System Emulation Technol- ogy (ISET)	Included	
Instrument control	LC & CE Drivers A.02.17 or above Instrument Control Framework (ICF) A.02.05 or above InfinityLab LC Companion (G7108AA) with firmware D.07.25 or above Instant Pilot (G4208A) with firmware B.02.22 or above Lab Advisor software B.02.10 or above	For details about supported software versions refer to the compatibility matrix of your version of the LC & CE Drivers
Communication	Controller Area Network (CAN), LAN, RS232C, APG remote: ready, start, stop, and shutdown signals	
Safety features and maintenance	Leak detection, safe leak handling, leak output signal for shutdown of the pumping system. No hazardous voltages in major maintenance areas. Extensive diagnostics, error detec- tion and display with Agilent Lab Advisor software.	

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Agilent 1260 Infinity II Flexible Pump (G7104C)

Table 4 Performance Specifications G7104C

Туре	Specification	Comments
GLP features	Early maintenance feedback (EMF) for continuous tracking of instru- ment usage in terms of seal wear and volume of pumped mobile phase with pre-defined and user settable limits and feedback messages. Electronic records of maintenance and errors.	
Housing	All materials are recyclable.	

Agilent 1260 Infinity II Quaternary Pump (G7111B)

Agilent 1260 Infinity II Quaternary Pump (G7111B)

Physical Specifications

Table 7 Physical Specifications G7111B

Туре	Specification	Comments
Weight	14.5 kg (32 lbs)	
Dimensions (height × width × depth)	180 x 396 x 436 mm (7.1 x 15.6 x 17.2 inches)	
Line voltage	100 - 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	80 VA, 65 W	
Ambient operating tempera- ture	4−55 °C (39−131 °F)	
Ambient non-operating tem- perature	-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)	
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

Agilent 1260 Infinity II Quaternary Pump (G7111B)

Performance Specifications

Table 8 Performance Specifications G7111B

Туре	Specification	Comments
Hydraulic system	Dual piston in series pump with servo-controlled variable stroke drive, power transmission by gears and ball screws, floating pistons	
Flow range	Settable: 0.001 – 10 mL/min Recommended: 0.2 – 10.0 mL/min	Set points in 0.001 mL/min increments
Flow precision	≤0.07 % RSD, or ≤0.02 min SD, whichever is greater	Based on retention time at con- stant temperature
Flow accuracy	±1 % or 10 µL/min, whichever is greater	Pumping degassed H ₂ O at 10 MPa (100 bar, 1450 psi)
Pressure operating range	Up to 60 MPa (600 bar, 8702 psi) up to 5 mL/min Up to 20 MPa (200 bar, 2901 psi) up to 10 mL/min	
Pressure pulsation	< 2 % amplitude (typically < 1.3 %), or < 0.3 MPa (3 bar, 44 psi), whichever is greater	At 1 mL/min isopropanol, at all pressures > 1 MPa (10 bar, 145 psi)
Compressibility compensation	User-selectable, based on mobile phase compressibility	
Recommended pH range	1.0 - 12.5	Solvents with pH < 2.3 should not contain acids which attack stainless steel
Gradient formation	Low pressure quaternary mix- ing/gradient capability using proprietary high-speed propor- tioning valve	
Delay volume	600 – 900 μL, dependent on back pressure	Measured with water at 1 mL/min (water/water with tracer)

Agilent 1260 Infinity II Quaternary Pump (G7111B)

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Туре	Specification	Comments
Composition range	Settable: 0 – 100 % Recommended: 5 – 95 % or 10 µL/min per channel, which- ever is greater, under recom- mended flow rate conditions	In 0.1 % increments
Composition precision	< 0.2 % RSD or < 0.04 min SD, whichever is greater	At 1 mL/min; based on reten- tion time at constant tempera- ture
Integrated degassing unit	Number of channels: 4 Internal volume per channel: 1.5 mL	
Instrument Control	LC & CE Drivers A.02.14 or above Instrument Control Framework (ICF) A.02.04 or above InfinityLab LC Companion (G7108AA) with firmware D.07.25 or above Instant Pilot (G4208A) with firmware B.02.20 or above Lab Advisor software B.02.08 or above	For details about supported software versions refer to the compatibility matrix of the LC & CE Drivers version in use
Communication	Controller Area Network (CAN) Local Area Network (LAN) Extended Remote Interface (ERI) Universal Serial Bus (USB)	
Safety and maintenance	Extensive diagnostics, error detection and display through Agilent Lab Advisor, leak detec- tion, safe leak handling, leak output signal for shutdown of the pumping system. Low voltage in major mainte- nance areas.	

Table 8 Performance Specifications G7111B

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Agilent 1260 Infinity II Quaternary Pump (G7111B)

Туре	Specification	Comments
GLP features	Early maintenance feedback (EMF) for continuous tracking of instrument usage in terms of seal wear and volume of pumped mobile phase with pre-defined and user settable limits and feedback messages. Electronic records of mainte- nance and errors	
Housing	All materials are recyclable	

Table 8 Performance Specifications G7111B

Agilent 1260 Infinity II Multisampler (G7167A)

Agilent 1260 Infinity II Multisampler (G7167A)

Physical Specifications

Table 31 Physical Specifications G7167A

Туре	Specification	Comments
Weight	22 kg (48.5 lbs)	w/o sample thermostat
Dimensions (height × width × depth)	320 x 396 x 468 mm (12.6 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	180 VA, 180 W	
Ambient operating tempera- ture	4 - 40 °C (39 - 104 °F)	
Ambient non-operating tem- perature	-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)	
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	Boiling point ≥56 °C (133 °F). Auto-ignition temperature ≥200 °C (394 °F).	

¹ 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.

Agilent 1260 Infinity II Multisampler (G7167A)

Performance Specifications

Table 32 Performance Specifications G7167A

Туре	Specification	Comments
Injection range for <i>Sin-gle-needle</i> instruments	Default: $0.1 - 100 \mu$ L in 0.1μ L increments optional: 20 μ L or 40 μ L (using optional 40 μ L analytical head)	Up to 800 bar using the 100 μL (default) or optional 40 μL analytical head
	0.1 – 500 μL or 900 μL in 0.1 μL increments (using 900 μL analytical head)	Pressure range up to 400 bar due to 900 µL analytical head
	0.1 – 120 μ L in 0.1 μ L increments with 1290 Infinity II large volume injection kit (hardware modification required) G4216-68711 0.1 – 500 μ L or 1500 μ L in 0.1 μ L increments with 100 μ L upgrade kit (hardware modification required) G7167-68711	Pressure range up to 800 bar Multi-draw mode (Injection into nee- dle-seat capillary)
Injection range for <i>Dual-needle</i> instru- ments	Default: 0.1 – 100 µL in 0.1 µL incre- ments; optional: 20 µL or 40 µL (using 100 µL analytical head)	Up to 800 bar using 100 µL analyti- cal head
	Up to 900 µL in 0.1 µL increments depending on installed loop size	Up to 800 bar using 100 µL analyti- cal head
Injection precision for single-needle instru- ments	<0.15 % RSD or SD <10 nL, whatever is greater	Measured caffeine
Injection precision for <i>dual-needle</i> instru- ments	<0.2 % RSD or SD <10 nL, whatever is greater	Measured caffeine
Injection linearity	0.9999 in the range of 0.1 – 100 µL	Measured caffeine
Pressure range	Up to 800 bar	Max pressure for basic instrument Feature is available for instruments manufactured in Sep 2017 or later. Requires LC and CE Drivers A.02.17 or later.
Sample viscosity range	0.2 - 5.0 cP	

Agilent 1260 Infinity II Multisampler (G7167A)

Туре	Specification	Comments
Sample capacity	<i>1H Drawer</i> up to 8 drawers and 16 positions Shallow well plates (MTP)	Max. 6144/1536 samples (384 MTP/96)
	2H Drawer up to 4 drawers and 8 positions MTP, deep well plates, vials, Eppen- dorf	3072 samples, 432 vials (2 mL)
	<i>3H Drawer</i> up to 2 drawers and 4 positions MTP, deep well plates, vials up to 6 mL, Eppendorf	1536 samples, 60 vials (6 mL), 384 vials (1 mL), 216 vials (2 mL)
Injection cycle time	<10 s using following standard con- ditions: Default draw speed: 100 µL/min Default eject speed: 400 µL/min Injection volume: 1 µL	Time between 2 injections is not mechanically limited, time delay depends on communication speed of software, OS or network connec- tions
Carryover	<0.003 % (30 ppm) Multisampler Standard and Dual Needle <0.0009 % (9 ppm) Multisampler Multiwash	
Multiwash	Outer needle wash and seat back- flush for carryover reduction with up to 3 different solvents	
Instrument Control	LC and CE Drivers A.02.10 or above Instrument Control Framework (ICF)	For details about supported soft- ware versions refer to the compati-

Instant Pilot (G4208A) with firmware and CE Drivers

A.02.03 or above

B.02.19 or above

signals

Lab Advisor B.02.06 or above

Controller Area Network (CAN), Local Area Network (LAN)

ERI: ready, start, stop and shut-down

Table 32 Performance Specifications G7167A

Communication

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Agilent 1260 Infinity II Multisampler (G7167A)

Туре	Specification	Comments
Maintenance and safety-related features	Extensive diagnostics, error detec- tion 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 instru- ment usage with user-settable limits and feedback messages. Electronic records of maintenance and errors.	
Housing	All materials recyclable.	

Table 32 Performance Specifications G7167A

2

Injectors

Agilent 1260 Infinity II Multisampler (G7167A)

Specifications of the Sample Thermostat

The sample thermostat is designed as a combination of a heater and vapor-compression refrigeration system. It uses non-Freon refrigerant (isobutane). This material is harmless to the environment and does not affect the ozone layer and global warming but it is combustable. Please adhere to the warnings listed in the manual.

Туре	Specification	Comments
Weight	<6 kg (< 13.2 lbs)	
Dimensions (height x width x depth)	205 x 340 x 370 mm (8.1 x 13.4 x 14.6 inches)	
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 – 104 °F)	
Ambient non-operat- ing 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)	
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 33 Physical Specifications of the Sample Thermostat

Agilent 1260 Infinity II Multisampler (G7167A)

Table 34 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 °C to 6 °C at a setpoint of 4 °C

ΝΟΤΕ

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 $\label{eq:main_main} \ensuremath{\mathsf{Minimum}}\xspace{1.5mm} \ensuremath{\mathsf{Immum}}\xspace{1.5mm} \ensuremath{\mathsf{Minimum}}\xspace{1.5mm} \ensuremath{\mathsf{Immum}}\xspace{1.5mm} \en$

Minimum LC driver revision for the sample thermostat is A.02.14.

Agilent 1260 Infinity II Diode Array Detector WR (G7115A)

Agilent 1260 Infinity II Diode Array Detector WR (G7115A)

Physical Specifications

Table 67 Physical Specifications G7115A

Туре	Specification	Comments
Weight	12 kg (26.5 lbs)	
Dimensions (height × width × depth)	140 x 396 x 436 mm (5.5 x 15.6 x 17.2 inches)	
Line voltage	100 - 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	110 VA, 100 W	
Ambient operating tempera- ture	4 - 55 °C (39 - 131 °F)	
Ambient non-operating tem- perature	-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)	
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

Agilent 1260 Infinity II Diode Array Detector WR (G7115A)

Performance Specifications

Table 68 Performance Specifications G7115A

Туре	Specification
Detection type	1024-element photodiode array
Light source	Deuterium and tungsten lamps
Number of signals	8 + 8 Reference wavelengths
Maximum data rate	120 Hz
Short term signal noise (ASTM)	< \pm 0.7·10 ⁻⁵ AU at 254 and 750 nm
Drift	< 0.9·10 ⁻³ AU/h at 254 nm and 750 nm
Linear absorbance range	> 2 AU (5 %) at 265 nm
Wavelength range	190 – 950 nm
Wavelength accuracy	\pm 1 nm, self-calibration with deuterium lines, verification with holmium oxide filter
Wavelength bunching	1 – 400 nm, programmable in 1 nm steps
Slit width	1, 2, 4 , 8, 16 nm
Diode width	~1 nm
Time programmable	Wavelength, polarity, peak width, lamp bandwidth, auto balance, wavelength range, threshold, spectra storage mode

UV-Detectors

Agilent 1260 Infinity II Diode Array Detector WR (G7115A)

Туре	Specification
Flow cells	 Standard: 13 µL volume, 10 mm cell path length and 120 bar (1740 psi) pressure maximum Standard bio-inert: 13 µL volume, 10 mm cell path length and 120 bar (1740 psi) pressure maximum Semi-micro: 5 µL volume, 6 mm cell path length and 120 bar (1740 psi) pressure maximum Micro: 2 µL volume, 3 mm cell path length, 120 bar (1740 psi) pressure maximum Semi-nano: 500 nL volume, 10 mm cell path length and 40 bar (580 psi) pressure maximum Nano: 80 nL volume, 6 mm cell path length and 40 bar (580 psi) pressure maximum High pressure: 1.7 µL volume, 6 mm cell path length and 40 bar (5800 psi) pressure maximum Prep SST: 3 mm cell path length and 120 bar (1740 psi) pressure maximum Prep Quartz: 3 mm cell path length and 50 bar (1740 psi) pressure maximum Prep Quartz: 0.3 mm cell path length and 50 or 20 bar (290 psi) pressure maximum Prep Quartz: 0.06 mm cell path length and 50 or 20 bar (290 psi) pressure maximum SFC Flow Cell: 13 µL volume, 10 mm cell path length and 400 bar (5800 psi) pressure maximum SFC Flow Cell LD: 2 µL volume, 3 mm cell path length and 400 bar (5800 psi) pressure maximum
Spectral tools	Data analysis software for spectra evaluation, including spectral libraries and peak purity functions
Analog output	Recorder/integrator: 100 mV or 1 V, output range 0.001 – 2 AU, one output
Instrument control	Lab Advisor B.02.08 or above LC and CE Drivers A.02.14 or above For details about supported software versions refer to the compatibil ity matrix of your version of the LC and CE Drivers.
Local control	Agilent Instant Pilot (G4208A) B.02.20 or above
Communication	LAN, Controller-Area Network (CAN), USB Extended Remote Interface (ERI): ready, start, stop and shut-down signals

Table 68 Performance Specifications G7115A

UV-Detectors

Agilent 1260 Infinity II Diode Array Detector WR (G7115A)

Туре	Specification
GLP	RFID for electronics records of flow cell and UV lamp conditions (path length, volume, product number, serial number, test passed, usage) Early maintenance feedback (EMF) for continuous tracking of instru- ment usage in terms of lamp burn time with user-setable limits and feedback messages. Electronic records of maintenance and errors. Verification of wavelength accuracy with built-in holmium oxide filter.
Safety and maintenance	Extensive diagnostics, error detection and display through Agilent Instant Pilot and Agilent Lab Advisor software. Leak detection, safe leak handling, leak output signal for shutdown of pumping system. Low voltages in major maintenance areas.
Housing	All materials recyclable.
Others	Second generation of Electronic temperature control (ETC) for the complete optical unit

Table 68 Performance Specifications G7115A

3

Agilent 1260 Infinity II Infinity Fluorescence Detector Spectra (G7121B)

Agilent 1260 Infinity II Infinity Fluorescence Detector Spectra (G7121B)

Physical Specifications

Table 83 Physical Specifications G7121B

Туре	Specification	Comments
Weight	11.9 kg (26.2 lbs)	
Dimensions (height × width × depth)	140 x 396 x 436 mm (5.5 x 15.6 x 17.2 inches)	
Line voltage	100 - 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	70 VA, 60 W	
Ambient operating tempera- ture	4-40 °C (39-104 °F)	
Ambient non-operating tem- perature	-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)	
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

Agilent 1260 Infinity II Infinity Fluorescence Detector Spectra (G7121B)

Performance Specifications

Туре Specification Comments Detection type Multi-signal wavelength fluorescence detector with rapid on-line scanning capabilities and spectral data analysis Single wavelength operation • RAMAN $(H_2O) > 500$ (noise reference measured at signal) Ex=350 nm, Em=397 nm, dark value 450 nm, standard flow cell RAMAN $(H_2O) > 3000$ (noise reference measured at dark value) Ex=350 nm, Em=397 nm, dark value 450 nm, standard flow cell Dual wavelength operation RAMAN (H₂O) > 300 Ex 350 nm, Em • 397 nm, standard flow cell RAMAN (H₂O) > 300 Ex 350 nm, Em • 450 nm, standard flow cell. Light source Xenon Flash Lamp, normal mode 20 W, economy mode 5 W, lifetime 4000 h Pulse frequency 296 Hz for single signal mode 74 Hz for economy/multi-wavelength/spectra mode Maximum data rate 74 Hz, 148 Hz Excitation monochromator Range: settable 200 - 1200 nm and zero-order Bandwidth: 20 nm (fixed) Emission monochromator Range: settable 200 - 1200 nm and zero-order Bandwidth: 20 nm (fixed) Reference system in-line excitation measurement Timetable programming up to 4 signal wavelengths, response time, PMT Gain, baseline behavior (append, free, zero), spectral parameters

Table 84 Performance Specifications G7121B

Special Detectors

Agilent 1260 Infinity II Infinity Fluorescence Detector Spectra (G7121B)

Туре	Specification	Comments
Spectrum acquisition	Excitation or Emission spectra Scan speed: 28 ms per datapoint (e.g. 0.6 s/spectrum 200 – 400 nm, 10 nm step) Step size: 1 – 20 nm Spectra storage: All	
Wavelength characteristic	Repeatability +/- 0.2 nm Accuracy +/- 3 nm setting	
Flow cells	 Standard: 8 μL volume and 20 bar (2 MPa) pressure maximum, fused silica block Optional: Bio-inert: 8 μL volume and 20 bar (2 MPa) pressure maximum, (pH 1-12) Micro: 4 μL volume and 20 bar (2 MPa) pressure maximum 	
Analog outputs	Recorder/integrator: 100 mV or 1 V, output range > 100 LU, two outputs	100 LU is the recom- mended range
Instrument Control	LC & CE Drivers A.02.14 or above Instrument Control Framework (ICF) A.02.03 or above InfinityLab LC Companion (G7108AA) with firmware D.07.25 or above Instant Pilot (G4208A) with firmware B.02.19 or above Lab Advisor software B.02.09 or above	For details about sup- ported software ver- sions refer to the compatibility matrix of your version of the LC and CE Drivers
Communication	Controller Area Network (CAN), USB, ERI: ready, start, stop and shut-down signals	
Safety features and mainte- nance	Leak detection, safe leak handling, leak out- put signal for shutdown of the pumping system. No hazardous voltages in major mainte- nance areas. Extensive diagnostics, error detection and display with Agilent Lab Advisor software.	

 Table 84
 Performance Specifications G7121B

Special Detectors

4

Agilent 1260 Infinity II Infinity Fluorescence Detector Spectra (G7121B)

Туре	Specification	Comments
GLP features	Early maintenance feedback (EMF) for con- tinuous tracking of instrument usage in terms of lamp burn time with pre-defined and user settable limits and feedback mes- sages. Electronic records of maintenance and errors.	
Housing	All materials are recyclable.	

Table 84 Performance Specifications G7121B

Column Compartments

Agilent 1290 Infinity II Multicolumn Thermostat (G7116B)

Agilent 1290 Infinity II Multicolumn Thermostat (G7116B)

Physical Specifications

Table 93 Physical Specifications G7116B

Туре	Specification	Comments
Weight	12.5 kg (27.6 lbs)	
Dimensions (height × width × depth)	160 x 435 x 436 mm (6.3 x 17.1 x 17.2 inches), Width 472 mm with column ID option Width with column identification kit: 472 mm	G7116B may have a Column ID tag reader on both sides.
Line voltage	100 - 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	150 VA, 150 W	
Ambient operating tempera- ture	4−55 °C (39−131 °F)	
Ambient non-operating tem- perature	-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)	
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

Agilent 1290 Infinity II Multicolumn Thermostat (G7116B)

Performance Specifications

Fasture	Creation
reature	Specification
Operating principle	Dual, independent Peltier-element thermostatted column compartment. Solvent pre-heating and still-air operation for reduction of chromatographic band-broadening under UHPLC-conditions. Up to three devices can be clus-
	tered and controlled by a single user interface for additional flexibility ¹ .
Temperature range	4 °C to 110 °C, (minimum 20 °C below ambient)
Temperature stability	±0.03 °C
Temperature accuracy	±0.5 °C (with calibration)
Temperature precision	0.05 °C
Independent Tem- perature zones	2 (in single device) up to 6 in clustered configuration ¹
Column capacity	8 columns of 100 mm length plus Quick-Connect fittings or pre-columns 4 columns of 300 mm length plus Quick-Connect fittings or pre-columns Selection of columns by single optional integrated 8-column selection valve (1300 bar) Maximum of 24 columns of 100 mm length plus Quick-Connect fittings or pre-columns 12 columns of 300 mm length plus Quick-Connect fittings or pre-columns with clustering ¹ of three devices.
Heat-up/cool-down time	5 min from ambient to 40 °C 10 min from 40 °C to 20 °C <30 min from 25 °C to 100 °C
Solvent heat exchang- ers	Individually quick-installable for every column. Available at 1 µL delay volume, 0.075 mm i.d. capillary (ultra-low dispersion), 1.6 µL delay volume, 0.12 mm i.d. capillary (standard) and 3 µL delay vol- ume, 0.12 mm i.d. capillary (high-flow) volume.
Valve options	 1x integrated valve drive as option 2x external valve drives as option to host user-exchangeable Quick-Change valve heads of different formats, materials and pressure ratings (up to 1300 bar): 2-position/6-port, 2-position/10-port, 6-column selection (6-pos/14-port), 8-column selection (8-pos/18-port). Equipped with tags, valve heads are automatically identified by SW

 Table 94
 Agilent 1290 Infinity II Multicolumn Thermostat (G7116B) Performance Specifications

Column Compartments

Agilent 1290 Infinity II Multicolumn Thermostat (G7116B)

Feature	Specification	
Instrument Control	Lab Advisor B.02.06 or above LC and CE Drivers A.02.11 or above For details about supported software versions refer to the compatibility matrix of your version of the LC and CE Drivers	
Local Control	Agilent Instant Pilot (G4208A) B.02.19 or above	
Communications	Controller-area network (CAN).	
Safety and mainte- nance	Extensive diagnostics, error detection and display (through Instant Pilot con- trol module and Agilent LabAdvisor), leak detection, safe leak handling, leak output signal for shutdown of pumping system. Low voltages in main main- tenance areas. Door-open sensor.	
GLP	Valve heads carrying tags with serial number, pressure rating, number of switches and valve type.	

Table 94 Agilent 1290 Infinity II Multicolumn Thermostat (G7116B) Performance Specifications

¹ Requires LC and CE drivers A.02.12 or above

NOTE

All specifications are valid for distilled water at ambient temperature (25 °C), set point at 40 °C and a stable flow range from 0.2 - 5 mL/min. Equilibration Time: 10 min.

Agilent 1260 Infinity II Degasser (G7122A)

Agilent 1260 Infinity II Degasser (G7122A)

Physical Specifications

Table 101 Physical Specifications G7122A

Туре	Specification	Comments
Weight	7.0 kg (15.4 lbs)	
Dimensions (height × width × depth)	80 × 396 × 436 mm (3.2 x 15.6 x 17.2 inches)	
Line voltage	100 - 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	5 W	
Ambient operating tempera- ture	4 – 55 °C (39 – 131 °F)	
Ambient non-operating tem- perature	-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)	
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

Specification Compendium

Agilent 1260 Infinity II Degasser (G7122A)

Performance Specifications

Table 102 Performance Specifications G7122A

Туре	Specification
Maximum flow rate	10 mL/min per channel
Number of channels	4
Internal volume per channel	Typically 12 mL
Materials in contact with sol- vent	PTFE, PEEK
pH range	1 – 14
Analog output (AUX)	For pressure monitoring, range 0 – 3 V