

Physical Specifications

Table 1 Physical Specifications

Type	Specification	Comments
Weight	15.5 kg (34 lbs)	
Dimensions (height × width × depth)	180 x 345 x 435 mm (7 x 13.5 x 17 inches)	
Line voltage	100 – 240 VAC, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	220 VA, 74 W / 253 BTU	Maximum
Ambient operating temperature	0–55 °C (32–131 °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 2000 m (6562 ft)	
Non-operating altitude	Up to 4600 m (15091 ft)	For storing the module
Safety standards: IEC, CSA, UL	Installation category II, Pollution degree 2	For indoor use only.

Performance Specifications

Table 2 Performance Specifications of the Agilent 1260 Infinity Binary Pump (G1312B)

Type	Specification	Comments
Hydraulic system	Two dual piston in series pumps with servo-controlled variable stroke drive, power transmission by gears and ball screws, floating pistons	
Setable flow range	Set points 0.001 – 5 mL/min, in 0.001 mL/min increments	
Flow range	0.05 – 5.0 mL/min	
Flow precision	≤0.07 % RSD or ≤0.02 min SD, whatever is greater	based on retention time at constant room temperature
Flow accuracy	± 1 % or 10 µL/min, what ever is greater	pumping degassed H ₂ O at 10 MPa (100 bar)
Pressure operating range	Operating range 0 – 60 MPa (0 – 600 bar, 0 – 8700 psi) up to 5 mL/min	
Pressure pulsation	< 2 % amplitude (typically < 1.3 %), or < 0.3 MPa (3 bar), whatever is greater, at 1 mL/min isopropanol, at all pressures > 1 MPa (10 bar, 147 psi) <i>Low delay volume configuration:</i> < 5 % amplitude (typically < 2 %)	
Compressibility compensation	Pre-defined, 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	High-pressure binary mixing	
Delay volume	<i>Standard delay volume configuration:</i> 600 – 800 µL, (includes 400 µL mixer), dependent on back pressure <i>Low delay volume configuration:</i> 120 µL	measured with water at 1 mL/min (water/caffeine tracer)

Table 2 Performance Specifications of the Agilent 1260 Infinity Binary Pump (G1312B)

Type	Specification	Comments
Composition range	settable range: 0 – 100 % recommended range: 1 – 99 % or 5 µL/min per channel, whatever is greater	
Composition precision	< 0.15 % RSD or < 0.04 min SD whatever is greater	at 0.2 and 1 mL/min; based on retention time at constant room temperature
Composition accuracy	± 0.35 % absolute, at 2 mL/min, at 10 MPa (100 bar)	(water/caffeine tracer)
Control	Agilent control software (e.g. ChemStation, EZChrom, OL, MassHunter)	
Local control	Agilent Instant Pilot	Revision B.02.00 or above
Analog output	For pressure monitoring, 1.33 mV/bar, one output	
Communications	Controller-area network (CAN), RS-232C, APG Remote: ready, start, stop and shut-down signals, LAN optional	
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 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	

NOTE

For use with flow rates below 500 µl/min or for use without damper and mixer a vacuum degasser is required.

All specification measurements are done with degassed solvents.