

Agilent 1290 Infinity II Variable Wavelength Detector (G7114B)

Physical Specifications

Table 33 Physical Specifications

Type	Specification	Comments
Weight	11 kg (24.3 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	80 VA, 70 W	
Ambient operating temperature	4 - 55 °C (39 - 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 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

Performance Specifications

Table 34 Agilent 1290 Infinity II Variable Wavelength Detector (G7114B) Performance Specifications

Feature	Specification
Detection type	Double-beam photometer
Light source	Deuterium lamp
Number of signals	Single and dual wavelength detection
Maximum data rate	240 Hz (single wavelength detection) 2.5 Hz (dual wavelength detection)
Noise	$<\pm 0.15 \cdot 10^{-5}$ AU, at 230 nm (single wavelength detection) $<\pm 0.80 \cdot 10^{-5}$ AU, at 230 nm and 254 nm (dual wavelength detection)
Drift	$<1 \cdot 10^{-4}$ AU/h, at 230 nm
Linearity	>2.5 AU upper limit
Wavelength range	190 – 600 nm
Wavelength accuracy	± 1 nm, self-calibration with deuterium lines, verification with holmium oxide filter
Wavelength precision	$<\pm 0.1$ nm
Slit width	6.5 nm typical over whole wavelength range
Time programmable	Wavelength, polarity, peak width, lamp on/off

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Feature	Specification
Flow cells	<p><i>Standard:</i> 14 μL volume, 10 mm cell path length and 40 bar (588 psi) pressure maximum</p> <p><i>Micro:</i> 2 μL volume, 3 mm cell path length and 120 bar (1760 psi) pressure maximum</p> <p><i>Semi-micro:</i> 5 μL volume, 6 mm cell path length and 40 bar (588 psi) pressure maximum</p> <p><i>Preparative:</i> 4 μL volume, 3 mm cell path length and 120 bar (1760 psi) pressure maximum</p> <p><i>Preparative:</i> 0.3 mm cell path length and 50 bar (725 psi) pressure maximum</p> <p><i>Preparative:</i> 0.06 mm cell path length and 50 bar (725 psi) pressure maximum</p> <p><i>High pressure:</i> 14 μL volume, 10 mm cell path length and 400 bar (5801 psi) pressure maximum</p>
Spectral tools	Stop-flow wavelength scan
Analog output	Recorder/Integrator 100 mV or 1 V, 1 output
Instrument Control	<p>Lab Advisor B.02.06 or above</p> <p>LC and CE Drivers A.02.11 or above</p> <p>For details about supported software versions refer to the compatibility matrix of your version of the LC and CE Drivers</p>
Local Control	Agilent Instant Pilot (G4208A) B.02.19 or above
Communication	LAN, Controller-area network (CAN), ERL: ready, start, stop and shut-down signals, USB
GLP	<p>Early maintenance feedback (EMF) for continuous tracking of instrument usage in terms of lamp burn time with user settable limits and feedback messages. Electronic records of maintenance and errors. RFID for electronics records of flow cell and UV lamp conditions (path length, volume, product number, serial number, test passed, and usage). Verification of wavelength accuracy with built-in holmium oxide filter.</p>
Safety and maintenance	<p>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. Tracking of flow cells and lamps with RFID (radio frequency identification) tags</p>