

Physical Specifications

Table 2 Physical Specifications

Type	Specification	Comments
Weight	11.5 kg (26 lbs)	
Dimensions (height x width x depth)	140 x 345 x 435 mm (5.5 x 13.5 x 17 inches)	
Line voltage	100 – 240 VAC, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	160 VA / 130 W / 444 BTU	Maximum
Ambient operating temperature	4–40 °C (39–104 °F)	
Ambient non-operating temperature	-40 – 70 °C (-40 – 158 °F)	
Humidity	< 80 % 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.

2 Site Requirements and Specifications

Performance Specifications

Performance Specifications

Specifications

Performance Specifications G4212A

Table 3 Performance Specifications G4212A

Type	Specification	Comments
Detection type	1024-element photodiode array	
Light source	Deuterium lamp	Equipped with RFID tag that holds lamp typical information.
Wavelength range	190 – 640 nm	
Short term noise (ASTM) Single and Multi-Wavelength	< $\pm 3 \times 10^{-6}$ AU at 230 nm/4 nm, with 10 mm Max-Light cartridge cell Typically < $\pm 0.6 \times 10^{-6}$ AU/cm at 230 nm/4 nm, with 60 mm Max-Light cartridge cell	see "Specification Conditions" below
Drift	< 0.5×10^{-3} AU/hr at 230 nm	see "Specification Conditions" below
Linear absorbance range	> 2.0 AU (5 %) at 265 nm	see "Specification Conditions" below
Wavelength accuracy	± 1 nm	After recalibration with deuterium lines
Wavelength bunching	2 – 400 nm	Programmable in steps of 1 nm
Slit width	1, 2, 4, 8 nm	Programmable slit
Diode width	~ 0.5 nm	
Signal data rate	up to 160 Hz	
Spectra Data rate	up to 160 Hz	

Table 3 Performance Specifications G4212A

Type	Specification	Comments
Flow cells	Max-Light Cartridge Cell (10 mm, $V(\sigma)$ 1.0 μL) (G4212-60008), Max-Light Cartridge Cell (60 mm, $V(\sigma)$ 4.0 μL) (G4212-60007), HDR Max-Light Cartridge Cell (3.7 mm, $V(\sigma)$ 0.4 μL) (G4212-60032) ULD Max-Light Cartridge Cell (10 mm, $V(\sigma)$ 0.6 μL) (G4212-60038) Max-Light Cartridge Cell Bio-inert (10 mm, $V(\sigma)$ 1.0 μL) (G5615-60018) Max-Light Cartridge Cell Bio-inert (60 mm, $V(\sigma)$ 4.0 μL) (G5615-60017) Max-Light Cartridge Test Cell (G4212-60011)	70 bar (1015 psi) Maximum Operating Pressure (MOP) ¹ 150 bar (2175 psi) Maximum Incidental Pressure (MIP) ² pH range 1.0 —12.5 (solvent dependent) available as standard and bio-inert versions. Cartridge type, equipped with RFID tags that holds cell typical information.
Local Control	Agilent Instant Pilot (G4208A)	B.02.11 or above
Test and troubleshooting software	Agilent LabAdvisor	B.01.03 SP4 or above
Analog outputs	Recorder/integrator: 100 mV or 1 V, output range 0.001 – 2 AU, one output	
Communications	Controller-area network (CAN), RS-232C, APG Remote: ready, start, stop and shut-down signals, LAN	
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 lamp burn time with user-settable limits and feedback messages. Electronic records of maintenance and errors. Verification of wavelength accuracy with the emission lines of the deuterium lamp.	
Housing	All materials recyclable.	

¹ Maximum Operating Pressure (MOP): The maximum pressure at which the system can operate continuously under normal conditions.

² Maximum Incidental Pressure (MIP): The maximum pressure which the system can experience during a short time.