

Physical Specifications

Table 1 Physical Specifications

Type	Specification	Comments
Weight	11.5 kg (26 lbs)	
Dimensions (width × depth × height)	345 × 435 × 140 mm (13.5 × 17 × 5.5 inches)	
Line voltage	100 – 240 VAC, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz ± 5 %	
Power consumption (G1315B/65B)	300 VA / 125 W / 427 BTU	Maximum
Ambient operating temperature	0 – 55 °C (32 – 131 °F)	
Ambient non-operating temperature	-40 – 70 °C (-4 – 158 °F)	
Humidity	< 95%, at 25 – 40 °C (77 – 104 °F)	Non-condensing
Operating altitude	Up to 2000 m (6500 ft)	
Non-operating altitude	Up to 4600 m (14950 ft)	For storing the detector
Safety standards: IEC, CSA, UL, EN	Installation category II, pollution degree 2. For indoor use only.	

Performance Specifications

Table 2 Performance Specifications Agilent 1200 Series DAD and MWD

Type	Specification	Comments
Detection type	1024-element photodiode array	
Light source	Deuterium and tungsten lamps	
Wavelength range	190 – 950 nm	
Short term noise (ASTM) Single and Multi-Wavelength	$\pm 1 \times 10^{-5}$ AU at 254 and 750 nm	See on page 27
Drift	2×10^{-3} AU/hr at 254 nm	See on page 27
Linear absorbance range	> 2 AU (upper limit)	See on page 27
Wavelength accuracy	± 1 nm	Self-calibration with deuterium lines, verification with holmium oxide filter
Wavelength bunching	1 – 400 nm	Programmable in steps of 1 nm
Slit width	1, 2, 4, 8, 16 nm	Programmable slit
Diode width	< 1 nm	
Flow cells	Standard: 13 μ l volume, 10 mm cell path length and 120 bar (1760 psi) pressure maximum Semi-Micro: 5 μ l volume, 6 mm cell path length and 120 bar (1760 psi) pressure maximum Micro: 2 μ l volume, 3 mm cell path length and 120 bar (1760 psi) pressure maximum High pressure: 1.7 μ l volume, 6 mm cell path length and 400 bar (5880 psi) pressure maximum 80 nano: 0.08 μ l volume, 10 mm cell path length and 50 bar (725 psi) pressure maximum 500 nano: 0.5 μ l volume, 10 mm cell path length and 50 bar (725 psi) pressure maximum	See " Optimization Overview " on page 69
Control and data evaluation	Agilent ChemStation for LC	
Analog outputs	Recorder/integrator: 100 mV or 1 V, output range 0.001 – 2 AU, two outputs	

Table 2 Performance Specifications Agilent 1200 Series DAD and MWD, continued

Type	Specification	Comments
Communications	Controller-area network (CAN), GPIB, RS-232C, APG Remote: ready, start, stop and shut-down signals, LAN optional	
Safety and maintenance	Extensive diagnostics, error detection and display (through control module and ChemStation), leak detection, safe leak handling, leak output signal for shutdown of pumping system. 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 built-in holmium oxide filter.	
Housing	All materials recyclable.	

NOTE

ASTM: "Standard Practice for Variable Wavelength Photometric Detectors Used in Liquid Chromatography".

Reference conditions: cell path length 10 mm, response time 2 s, flow 1 ml/min LC-grade Methanol, slit width 4 nm.

Linearity measured with caffeine at 265 nm.

For environmental conditions refer to "[Environment](#)" on page 23.