

Performance Specifications

Specifications

Performance Specifications G1315C

Table 3 Performance Specifications G1315C

Type	Specification	Comments
Detection type	1024-element photodiode array	
Light source	Deuterium and tungsten lamps	The UV-lamp is equipped with RFID tag that holds lamp typical information.
Data rate	up to 80 Hz	
Wavelength range	190 – 950 nm	
Short term noise (ASTM) Single and Multi-Wavelength	$< \pm 0.7 \cdot 10^{-5}$ AU at 254 and 750 nm	see " <i>Specification Conditions</i> " below
Drift	$< 0.9 \cdot 10^{-3}$ AU/h at 254 nm	see " <i>Specification Conditions</i> " below
Linear absorbance range	> 2 AU (5 %) at 265 nm	see " <i>Specification Conditions</i> " below
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	

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Flow cells	Standard: 13 μ L volume, 10 mm cell path length and 120 bar (1740 psi) pressure maximum Standard bio-inert: 13 μ L volume, 10 mm cell path length and 120 bar (1740 psi) pressure maximum Semi-micro: 5 μ L volume, 6 mm cell path length and 120 bar (1740 psi) pressure maximum Micro: 2 μ L volume, 3 mm cell path length, 120 bar (1740 psi) pressure maximum Semi-nano: 500 nL volume, 10 mm cell path length and 50 bar (725 psi) pressure maximum Nano: 80 nL volume, 6 mm cell path length and 50 bar (725 psi) pressure maximum High pressure: 1.7 μ L volume, 6 mm cell path length and 400 bar (5800 psi) pressure maximum Prep SST: 3 mm cell path length and 120 bar (1740 psi) pressure maximum Prep Quartz: 0.3 mm cell path length and 20 bar (290 psi) pressure maximum Prep Quartz: 0.06 mm cell path length and 20 bar (290 psi) pressure maximum	All flow cells are equipped with RFID tags that hold cell typical information. pH range 1.0—9.5 (12.5 solvent dependent with bio-inert version)
Time programmable	Wavelength, polarity, peak width, lamp bandwidth, autobalance, wavelength range, threshold, spectra storage mode	
Spectral tools	Data analysis software for spectra evaluation, including spectral libraries and peak purity functions	

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Type	Specification	Comments
Control and data evaluation	Agilent ChemStation for LC (32-bit)	For 1260 systems: <ul style="list-style-type: none"> Revision B.04.02 DSP2 or above For 1100/1200 systems: <ul style="list-style-type: none"> Revision B.01.03 or above
Local Control	Agilent Instant Pilot (G4208A)	For 1260 systems: <ul style="list-style-type: none"> B.02.11 or above For other systems: <ul style="list-style-type: none"> B.02.09 or above
Analog outputs	Recorder/integrator: 100 mV or 1 V, output range 0.001 – 2 AU, two outputs	
Communications	Controller-area network (CAN), RS-232C, APG Remote: ready, start, stop and shut-down signals, LAN	
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	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 instrument 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.	
Housing	All materials recyclable.	
Others	Electronic temperature control (ETC) for the complete optical unit	