



Agilent 1260 Infinity II Diode Array Detector WR

Data Sheet

Product Description

The Agilent 1260 Infinity II Diode Array Detector WR offers multiple wavelength and full spectral detection at up to 120 Hz sampling rate, keeping up with the analysis speed of fast LC. Even at high data rates, the 1260 Infinity II DAD WR enables precise identification, quantification, and peak purity analysis at trace levels. Maximum flexibility is guaranteed with a wide wavelength range of 190 to 950 nm with dual-lamp design, as well as the choice of 12 analytical, preparative, and SFC flow cells.



Features

- Fast data acquisition - full spectral data acquisition rate of 120 Hz increases resolution and delivers fast, highly sensitive peak purity analysis and spectral confirmation – at trace levels.
- Highest sensitivity - dual-lamp design allows analysis of wavelengths between 190 to 950 nm.
- Simultaneous data acquisition - The diode array design enables simultaneous acquisition of up to eight compound-specific wavelengths for increased sensitivity and selectivity.
- Rapid optimization of sensitivity, linearity and spectral resolution-programmable slit (1 to 16 nm) provides optimum incident light conditions.
- Eliminates background interference - with reference wavelengths.
- Minimized short-term noise ($< \pm 7 \mu\text{AU}$ ASTM) - low noise front-end electronics and special flow cell design deliver lowest detection limits.
- Maximum flexibility, compatibility and investment protection – with a range of 12 analytical, preparative and SFC flow cells.



Specifications

Table 1 Physical Specifications

Type	Specification	Comments
Weight	12 kg (26.5 lbs)	
Dimensions (height × width × depth)	140 x 396 x 436 mm (5.5 x 15.6 x 17.0 inches)	
Line voltage	100 – 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	110 VA / 100 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

Table 2 Performance specifications G7115A

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 120 Hz	
Wavelength range	190 – 950 nm	
Short term noise (ASTM) Single and Multi-Wavelength	< ± 0.7·10 ⁻⁵ AU at 254 and 750 nm	
Drift	< 0.9·10 ⁻³ AU/h at 254 nm	
Linear absorbance range	> 2 AU (5 %) at 265 nm	

Table 2 Performance specifications G7115A

Type	Specification	Comments
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	<p>Standard: 13 µL volume, 10 mm cell path length and 120 bar (1740 psi) pressure maximum</p> <p>Standard bio-inert: 13 µL volume, 10 mm cell path length and 120 bar (1740 psi) pressure maximum</p> <p>Semi-micro: 5 µL volume, 6 mm cell path length and 120 bar (1740 psi) pressure maximum</p> <p>Micro: 2 µL volume, 3 mm cell path length, 120 bar (1740 psi) pressure maximum</p> <p>Semi-nano: 500 nL volume, 10 mm cell path length and 50 bar (725 psi) pressure maximum</p> <p>Nano: 80 nL volume, 6 mm cell path length and 50 bar (725 psi) pressure maximum</p> <p>High pressure: 1.7 µL volume, 6 mm cell path length and 400 bar (5800 psi) pressure maximum</p> <p>Prep SST: 3 mm cell path length and 120 bar (1740 psi) pressure maximum</p> <p>Prep Quartz: 0.3 mm cell path length and 20 bar (290 psi) pressure maximum</p> <p>Prep Quartz: 0.06 mm cell path length and 20 bar (290 psi) pressure maximum</p> <p>SFC Flow Cell: Light path 10 mm, Pressure Rating 400 bar, Internal Volume 13 µL</p> <p>SFC Flow Cell LD: Light Path 3 mm, Pressure Rating 400 bar, Internal Volume 2 µL</p>	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	

Table 2 Performance specifications G7115A

Type	Specification	Comments
Spectral tools	Data analysis software for spectra evaluation, including spectral libraries and peak purity functions	
Instrument Control	Lab Advisor B.02.08 or above LC and CE Drivers A.02.14 or above	For details about supported software versions refer to the compatibility matrix of your version of the LC and CE Drivers
Local control	Agilent Instant Pilot (G4208A)	B.02.20 or above
Analog outputs	Recorder/integrator: 100 mV or 1 V, output range 0.001 – 2 AU, two outputs	
Communications	Controller-area network (CAN), USB Extended Remote Interface (ERI): ready, start, stop and shut-down signals	
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-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.	
Others	Second generation of Electronic temperature control (ETC) for the complete optical unit	

Ordering Details

Description	Product Number
1260 Infinity II Diode Array Detector WR Provides 120 Hz data acquisition rate RFID tags for flow cell and lamp. Includes long-life deuterium and tungsten lamp. Flow cell must be ordered as option.	G7115A
Micro flow cell 2 µL 3 mm path length, 120 bar pressure limit, with identification tag.	G7115A#010
Flow cell 80 nL 6 mm path length, 50 bar pressure limit.	G7115A#012
Flow cell 500 nL 10 mm path length, 50 bar pressure limit.	G7115A#014
Semi-micro flow cell 5 µL 6 mm path length, 120 bar pressure limit, with identification tag.	G7115A#016
Standard flow cell 13 µL 10 mm path length, 120 bar pressure limit.	G7115A#018
High-pressure micro flow cell 1.7 µL 6 mm path length, 400 bar pressure limit.	G7115A#020
Flow cell SFC-LD, SST For low dispersion SFC, 400 bar pressure limit.	G7115A#021
Preparative flow cell SS 3 mm path length, 120 bar pressure limit.	G7115A#022
Flow cell for SFC High-pressure std flow cell for SFC	G7115A#023
Preparative flow cell Quartz, 0.3 mm path length, 20 bar pressure limit	G7115A#024
Preparative flow cell Quartz, 0.06 mm path length, 20 bar pressure limit	G7115A#026
Bio-inert standard flow cell RFID tag, 10 mm path length, 13 µL, 120 bar pressure limit	G7115A#028

www.agilent.com/chem/infinitylab-lc-series

This information is subject to change without notice.

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