Agilent 1260 Infinity II Variable Wavelength Detector

Data Sheet

Product Description

The Agilent 1260 Infinity II Variable Wavelength Detector offers lowest baseline noise and drift, resulting in lowest detection limits for robust quantification of trace level components. Even more sample information can be acquired in dual-wavelength mode. Time-programmable wavelength switching provides optimum sensitivity and selectivity for your applications.Highest productivity can be achieved with fast analysis at up to 120 Hz data rates.

Features

- Robust quantification of trace level components - lowest baseline noise and drift results in lowest detection limits.
- More analyte information per run - with dual-wavelength capabilities.
- High-resolution gaining fast LC - at up to 120 Hz data acquisition rate.
- Reliable, simultaneous quantification - Wide linear range (>2.5 AU upper limit) for reliable, simultaneous quantification of primary compounds, by-products and impurities.
- Efficient temperature control - next generation electronic temperature control (ETC) provides maximum baseline stability and practical sensitivity under fluctuating ambient temperature and humidity conditions.
- Automatic wavelength verification - provided using built-in holmium oxide filter.
- Fast wavelength optimization- with stop-flow wavelength scanning.
- New levels of data traceability - with radio frequency identification (RFID) technology for flow cells and lamps.
- Maximum flexibility, compatibility and investment protection – with a range of 7 analytical and preparative flow cells provide.
- Continuous tracking of instrument usage - early maintenance feedback (EMF), continuously tracks lamp burn time, with user-defined limits and message types.
- Extensive analytics, error detection and displays - using Agilent Lab Advisor software.

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Specifications

Table 1 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

Table 2 Agilent 1260 Infinity II Variable Wavelength Detector (G7114A) Performance Specifications

Feature	Specification
Detection type	Double-beam photometer
Light source	Deuterium lamp
Number of signals	Single and dual wavelength detection
Maximum data rate	120 Hz (single wavelength detection) 2.5 Hz (dual wavelength detection)
Noise	$<\pm 0.25 \cdot 10^{-5}$ 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

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Feature	Specification
Wavelength precision	<±0.1 nm
Slit width	6.5 nm typical over whole wavelength range
Time programmable	Wavelength, polarity, peak width, lamp on/off
Flow cells	**Standard:** 14 µL volume, 10 mm cell path length and 40 bar (588 psi) pressure maximum **Micro:** 2 µL volume, 3 mm cell path length and 120 bar (1760 psi) pressure maximum **Semi-micro:** 5 µL volume, 6 mm cell path length and 40 bar (588 psi) pressure maximum **Preparative:** 4 µL volume, 3 mm cell path length and 120 bar (1760 psi) pressure maximum **Preparative:** 0.3 mm cell path length and 50 bar (725 psi) pressure maximum **Preparative:** 0.06 mm cell path length and 50 bar (725 psi) pressure maximum **High pressure:** 14 µL volume, 10 mm cell path length and 400 bar (5801 psi) pressure maximum
Spectral tools	Stop-flow wavelength scan
Analog output	Recorder/Integrator 100 mV or 1 V, 1 output
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.02.19 or above
Communication	Controller-area network (CAN), USB ERI: ready, start, stop and shut-down signals
GLP	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.
Safety and maintenance	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

Ordering Details

Description	Product Number
1260 Infinity II Variable Wavelength Detector For fast, programmable single (up to 120 Hz) and dual-wavelength detection. RFID tracking technology for flow cells and UV lamp. Flow cell must be ordered as an option.	G7114A
Micro flow cell for VWD Includes stainless steel flow cell with RFID tag for identification, 3 mm path length, 2 µL cell volume.	G7114A #010
Semi-micro flow cell for VWD Includes stainless steel flow cell with RFID tag for identification, 6 mm path length, 5 µL cell volume.	G7114A #016
Standard flow cell for VWD Includes stainless steel flow cell with RFID tag for identification, 10 mm path length, 14 µL cell volume.	G7114A #018
High-pressure flow cell for VWD Includes stainless steel flow cell with RFID tag for identification, 10 mm path length, 14 µL cell volume, 400 bar pressure limit.	G7114A#021
Preparative flow cell (3 mm) for VWD Includes stainless steel flow cell with RFID tag for identification, 3 mm path length, 4 µL cell volume.	G7114A#022
Preparative flow cell (0.3 mm) for VWD Includes quartz flow cell with RFID tag for identification, 0.3 mm path length.	G7114A #024
Preparative flow cell (0.06 mm) for VWD Includes quartz flow cell with RFID tag for identification, 0.06 mm path length.	G7114A #026

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Published July 1, 2016
5991-7082EN

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