

# Agilent 1260 Infinity II Infinity Fluorescence Detector Spectra (G7121B)

## Physical Specifications

**Table 49** Physical Specifications

Type	Specification	Comments
Weight	11.9 kg (26.2 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	70 VA, 60 W	
Ambient operating temperature	4-40 °C (39-104 °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

## Performance Specifications

**Table 50** Performance Specifications Agilent 1260 Infinity II Fluorescence Detector SPECTRA (G7121B)

Type	Specification	Comments
Detection type	Multi-signal fluorescence detector with rapid on-line scanning capabilities and spectral data analysis	
Performance specifications	<p>Single wavelength operation:</p> <ul style="list-style-type: none"> <li>RAMAN (H<sub>2</sub>O) &gt; 500 (noise reference measured at signal) Ex=350 nm, Em=397 nm, dark value 450 nm, standard flow cell</li> <li>RAMAN (H<sub>2</sub>O) &gt; 3000 (noise reference measured at dark value) Ex=350 nm, Em=397 nm, dark value 450 nm, standard flow cell</li> </ul> <p>Dual wavelength operation: RAMAN (H<sub>2</sub>O) &gt; 300 Ex 350 nm, Em 397 nm and Ex 350 nm, Em 450 nm, standard flow cell.</p>	Reference conditions: Standard cell 8 µL, response time 4 s, HPLC-grade water and restriction capillary.
Light source	Xenon Flash Lamp, normal mode 20 W, economy mode 5 W, lifetime 4000 h	
Pulse frequency	296 Hz for single signal mode 74 Hz for economy mode	
Maximum data rate	148 Hz	
Excitation monochromator	Range: settable 200 nm - 1200 nm and zero-order Bandwidth: 20 nm (fixed) Monochromator: concave holographic grating, F/1.6, blaze: 300 nm	
Emission monochromator	Range: settable 200 nm - 1200 nm and zero-order Bandwidth: 20 nm (fixed) Monochromator: concave holographic grating, F/1.6, blaze: 400 nm	
Reference system	in-line excitation measurement	

## Agilent 1260 Infinity II Infinity Fluorescence Detector Spectra (G7121B)

**Table 50** Performance Specifications Agilent 1260 Infinity II Fluorescence Detector SPECTRA (G7121B)

Type	Specification	Comments
Timetable programing	up to 4 signal wavelengths, response time, PMT Gain, baseline behavior (append, free, zero), spectral parameters	
Spectrum acquisition	Excitation or Emission spectra Scan speed: 28 ms per datapoint (e.g. 0.6 s/spectrum 200 – 400 nm, 10 nm step) Step size: 1 – 20 nm Spectra storage: All	
Wavelength characteristic	Repeatability +/- 0.2 nm Accuracy +/- 3 nm setting	
Flow cells	Standard: 8 µL volume and 20 bar (2 MPa) pressure maximum, fused silica block  Optional: <ul style="list-style-type: none"> <li>• Bio-inert: 8 µL volume and 20 bar (2 MPa) pressure maximum, (pH 1–12)</li> <li>• Semi-Micro: 4 µL volume and 20 bar (2 MPa) pressure maximum</li> </ul>	
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 > 100 LU, two outputs	100 LU is the recommended range, see <i>"FLD Scaling Range and Operating Conditions"</i>
Communications	Controller-area network (CAN), USB ERI: ready, start, stop and shut-down signals	

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**Table 50** Performance Specifications Agilent 1260 Infinity II Fluorescence Detector SPECTRA (G7121B)

Type	Specification	Comments
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, using the Raman band of water.	
Housing	All materials recyclable.	