



# Agilent 1290 Infinity II Evaporative Light Scattering Detector

## Data Sheet

### Product Description



The Agilent 1290 Infinity II Evaporative Light Scattering Detector (ELSD) is a high capability instrument ideal for detecting analytes with no UV chromophore as it does not rely on optical absorption. The blue laser light source delivers excellent sensitivity whatever the compound to be analyzed. The 1290 Infinity II ELSD is the only ELSD that delivers sub-ambient operation for unrivalled detection of thermally labile analytes other ELSDs miss. The instrument delivers evaporation down to 10 °C providing maximum sensitivity for compounds with significant volatility below 30 °C. The extended dynamic range PMT technology gives four orders of magnitude detection for trace impurity analysis. Real-time gas control, Peltier cooling components and a range of other high quality equipment and enhancements provide excellent sensitivity, reproducibility and flexibility for many applications.

### Features

- **High sensitivity throughput** – each process is enabled by real-time control during injection, with programmable software. This sensitivity delivers superb responses for all compounds to low nanogram levels.
- **Peltier-cooled evaporation tube** – cools to 10 °C to 80 °C preventing degradation of thermally labile compounds.
- **Rapid heating and cooling of the evaporator tube** – minimizes equilibration time and increases sample throughput.
- **Extended dynamic range detection technology gives four orders of magnitude** – enabling analysis of samples with trace levels of impurities in a highly concentrated sample matrix, eliminating time-consuming reanalysis, recalibration or sample preparation.
- **Real-time gas control** – provides a uniform response across a solvent gradient that minimizes quantification errors.
- **Control and data collection system** – is compatible with many vendor platforms.
- **Solvent enhancement effects during gradient elution are eliminated** – through real-time evaporator gas programming for quantification.
- **Low dispersion and high-speed data output rates** – for fast LC applications.
- **Superb reproducibility below 2 %** – for reliable and accurate results.
- **Full DMSO transparency** – keeps early eluting compounds detectable.

## Specifications

**Table 1** Physical Specifications

Type	Specification	Comments
Weight	11 kg (non-cooled), 13 kg (cooled)	
Dimensions (height × width × depth)	415 x 200 x 450 mm (16.3 x 7.9 x 17.7 inches)	
Line voltage	100 – 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	150 W (max)	
Ambient operating temperature	10–35 °C (50–95 °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 2000 m (6562 ft)	
Non-operating altitude	Up to 4600 m (15092 ft)	For storing the module
Safety standards: IEC, CSA, UL	Installation category II, Pollution degree 2	For indoor use only.

**Table 2** Agilent 1290 Infinity II Evaporative Light Scattering Detector (G7102A)  
Performance Specifications

<b>Type</b>	<b>Specification</b>
Light Source	LASER 405 nm, 10 mW (Class 3B)
Detector	Dual PMT with digital signal processing
Nebuliser	OFF, 25 – 90 °C
<b>Evaporator</b>	
Non-cooled	OFF, 25 – 120 °C
Cooled	OFF, 10 – 80 °C
Gas Flow Range	0.9 – 3.25 SLM (controlled gas shut-off)
Dynamic Raange	4 orders of magnitude
Short Term Noise	<0.1 LSU/h (1 mL/min water).
Drift	<1 LSU/h (1 mL/min water).
Operating Pressure	60 – 100 psi ( 4.1 – 6.9 bar)
Eluent Flow range	0.2 – 5.0 mL/min
Digital Output	10, 40 or 80 Hz ( 24 bit)
Remote Operation	Remote Start Input
Communication	Ethernet Serial (RS232) Remote Start Input Pump Stop: 1 Contact closure
PC Control	ELSD driver for OpenLAB ChemStation edition ELSD driver for OpenLAB EZChrom edition
Safety and maintenance	Gas shut-off Valve, Leak Detection, Laser Interlock

## Ordering Details

Description	Part Number
<b>1290 Infinity II Evaporative Light Scattering Detector (ELSD), cooled</b>	G7102A
1290 Infinity II ELSD, non-cooled	G7102A#101
Agilent ELSD dimension software	G7102A#201
Remote start cable (3rd party for dimension)	G7102A#301
Trigger cable for Infinity II dimension software	G7102A#401
Infinity II modules to ELSD injection sync cable	G7102A#501
ELSD air adapter kit	G7102A#601

[www.agilent.com/chem/1200](http://www.agilent.com/chem/1200)

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