



Agilent 1260 Infinity II Refractive Index Detector

Data Sheet

Product Description

The 1260 Infinity II Refractive Index Detector is an excellent choice for reproducible, routine analysis of compounds that do not have a UV chromophore. Rapid equilibration times and stable baselines make it easy to analyze carbohydrates, triglycerides, organic acids and pharmaceutical excipients. The detector is also ideal for polymer characterization using gel permeation chromatography (GPC).



Features

- Minimum baseline noise for excellent sensitivity and low limits of detection.
- Consistent, reproducible results - unmatched thermal and electronic stability using electronic temperature control (ETC) maintains a steady optical unit temperature of up to 55 °C.
- 74 Hz data rate – ensures even the narrowest peaks can be detected and accurately quantified.
- Fast start-up - thermal design means initial setup is typically less than two hours; it generally takes less than one hour for the module to warm up.
- Optimized light levels - light intensity is adjusted automatically to compensate for lamp degradation and flow cell staining.
- Save time and solvents - you can use the recycle valve to keep the system at operating conditions, avoiding warm-up time and saving solvent.
- Automatic purging of the reference flow cell using programmable purge and wait times.
- Easy maintenance - convenient front access for inspection and maintenance of tubing and valves.
- Early maintenance feedback (EMF) for continuous tracking of instrument usage (purging lamp burn time) with customizable limits and feedback messages.
- Extensive diagnostics, including error detection and display with Instant Pilot controller and Lab Advisor software.
- RoHS compliant – in line with European Union directives regarding specific hazardous materials.



Specifications

Table 1 Physical Specifications

Type	Specification	Comments
Weight	15 kg (33 lbs)	
Dimensions (height × width × depth)	180 x 396 x 436 mm (7.1 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	70 W / 80 VA	
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 Refractive Index Detector (G7162A) Performance Specifications

Type	Specification	Comments
Detection type	Refractive Index	
Refractive index range	1.00 – 1.75 RIU, calibrated	
Measurement range	±600·10 ⁻⁶ RIU	
Optical zeroing		via set screw
Optics temperature control	5 °C above ambient to 55 °C	
Sample cell	Volume: 8 µL Maximum pressure: 5 bar (0.5 MPa) Maximum flow rate: 5 mL/min	
Valves	Automatic purge and automatic solvent recycle	
Volumes	Inlet port to sample cell 62 µL, inlet port to outlet port 590 µL	

Table 2 Agilent 1260 Infinity II Refractive Index Detector (G7162A)
Performance Specifications

Type	Specification	Comments
Liquid contact materials	316 stainless steel, PTFE and quartz glass	
pH range	2.3 – 9.5	
Performance specifications	Short term noise: $<\pm 1.25 \cdot 10^{-9}$ RIU Drift: $<200 \cdot 10^{-9}$ RIU/hr	
Time programmable parameters	polarity, peak width	
Maximum data rate	74 Hz	
Detector zero	automatic zero before analysis	
Control and data evaluation	Parameter entry, signal display, on-line help and diagnostics with the Agilent 1260 Infinity Control Module.	
Analog outputs	Recorder/integrator: 100 mV or 1 V, output range selectable, one output	
Communications	LAN, controller-area network (CAN), 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	Early maintenance feedback (EMF) for continuous tracking of instrument usage with user-selectable limits and feedback messages. Electronic records of maintenance and errors. Automated operational qualification/performance verification (OQ/PV).	
Housing	All materials recyclable.	

Ordering Details

Table 3 1260 Infinity II Refractive Index Detector Ordering Details

Description	Product Number
1260 Infinity II Refractive Index Detector	G7162A

www.agilent.com/chem/1200

This information is subject to change without notice.

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