# Agilent 1260 Infinity II Binary Pump

Data Sheet

## Product Description

The Agilent 1260 Infinity II Binary Pump is ideally suited for a broad range of LC applications using conventional or superficially porous particles columns, even STM column technology can be used. Gradient formation is based on a high-pressure mixing principle and delay volumes (standard or low) can be easily configured by the user. The Agilent 1260 Infinity II Binary Pump is the pump of choice for reproducible gradients and high-performance providing high-throughput and fast separations including the use of STM column technology. For routine applications, with UV or MS detection, where high speed and resolution with uncompromised data quality are required, this is the pump of choice.

## Features

- Configurable delay volume - down to 120 µL together with a flow range up to 5 mL/min provides universal applicability.
- Fast and easy - change from standard to low delay volume configuration is enabled.
- High gradient performance - even at low % B and narrow-bore flow rates.
- Integrated 2-channel-degasser.
- Fast and precise gradients - the pump is the perfect choice for fast and precise gradients using LC/MS, as well as UV-only systems.
- Fully exploits the speed and separation potential of Poroshell.

## Specifications

**Table 1** Physical Specifications

| Type | Specification | Comments |
|---|---|---|
| Weight | 17.6 kg (38.8 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 | 90 VA / 74 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 1260 Infinity II Binary Pump (G7112B)

| Type | Specification |
|---|---|
| Hydraulic system | Two dual piston in series pumps with servo-controlled variable stroke drive, power transmission by gears and ball screws, floating pistons |
| Flow range | settable: 0.001 – 5 mL/min<br>recommended: 0.05 – 5.0 mL/min |
| Flow precision | ≤0.07 % RSD or < 0.02 min SD, whichever is greater |
| Flow accuracy | ± 1 % or 10 µL/min, whichever is greater |
| Pressure operating range | Up to 60 MPa (600 bar, 8702 psi) up to 5 mL/min |
| Pressure pulsation | < 2 % amplitude (typically < 1.3 %), or < 0.3 MPa (3 bar, 44 psi), whichever is greater<br>**Low delay volume configuration:** < 5 % amplitude (typically < 2 %) |
| Compressibility compensation | Pre-defined, based on mobile phase compressibility |
| Recommended pH range | 1.0 – 12.5 |
| Gradient formation | High-pressure binary mixing |
| Delay volume | **Standard delay volume configuration:**600 – 900 µL, (includes 400 µL mixer), dependent on back pressure<br>**Low delay volume configuration:**120 µL |
| Composition range | settable: 0 – 100 %<br>recommended: 1 – 99 % or 5 µL/min per channel, whichever is greater |
| Composition precision | < 0.15 % RSD or < 0.04 min SD, whichever is greater |
| Composition accuracy | ± 0.35 % absolute |
| Integrated degassing unit | Number of channels: 2<br>Internal volume per channel: 1.5 mL |
| Control | Agilent control software (e.g. ChemStation, EZChrom, OpenLAB CDS, MassHunter) |
| Instrument Control | Lab Advisor B.02.08 or above<br>LC and CE Drivers A.02.14 or above |
| Local control | Agilent Instant Pilot (G4208A) |
| Communications | Controller-area network (CAN), Extended Remote Interface (ERI), Local Area Network (LAN) |
| Safety and maintenance | Extensive diagnostics, error detection and display through Agilent LabAdvisor, leak detection, safe leak handling, leak output signal for shutdown of the pumping system. Low voltage in major maintenance areas. |

**Table 2** Performance Specifications 1260 Infinity II Binary Pump (G7112B)

| Type | Specification |
|---|---|
| GLP features | Early maintenance feedback (EMF) for continuous tracking of instrument usage in terms of seal wear and volume of pumped mobile phase with pre-defined and user settable limits and feedback messages. Electronic records of maintenance and errors. |
| Housing | All materials are recyclable |

## Ordering Details

**Table 3** Ordering Details 1260 Infinity II Binary Pump

| Description | Product Number |
|---|---|
| **Agilent 1260 Infinity II Binary Pump**<br>600 bar pressure limit. | G7112B |
| HPLC System Tool Kit for 1260/1290 Infinity II LC | G7112B#001 |
| Lab Advisor Advanced Software | G7112B#004 |
| 1260 Infinity II Max Uptime Kit | G7112B#007 |
| 1260 Infinity II Low Dispersion Kit MCT | G7112B#008 |
| Active Seal Wash | G7112B#030 |
| Solvent Selection Valve | G7112B#031 |
| Delete Solvent Cabinet | G7112B#960 |

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


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