



Agilent 1290 Infinity Autosampler

Features, Specifications and Ordering Details



Fast Sample Injection with Highest Precision and Lowest Carryover

The 1290 Infinity Autosampler is part of the 1290 Infinity LC system that is compatible with operating pressures up to 1200 bar. It features the next-generation flow-through design for high precision injection of both large and small volumes without the need to change sample loops. Only the injected volume is required from the sample and no valuable sample is wasted for flushing. Inert materials in the metering device seal and needle seat as well as reduced hydraulic volumes achieve extremely low carryover. A new module, the 1290 Infinity Flexible Cube, combines seamlessly with the autosampler for infinite injection flexibility. The Flexible Cube facilitates fixed-loop injection mode for ultra-fast cycle times as well as automatic backflushing of the autosampler's needle seat for lowest carryover yet.

Features

- Next generation flow-through design with ultra low system volume for operation up to 1200 bar
- Highest injection precision for both large and small volumes without changing loops
- No waste of valuable sample for flushing
- Short injection cycles for higher productivity through overlapped injections
- Best carryover performance through inert seal and needle seat material as well as backflush of needle seat (requires 1290 Infinity Flexible Cube)
- New cartridge loop for ultimate ease-of-use
- Flexible and convenient sample handling with different types of sample containers such as well-plates and vials – process up to 768 samples unattended with 384-well plates
- Peltier temperature control from 4 to 40 °C for thermally labile samples (requires 1290 Infinity Thermostat)



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Specifications – Agilent 1290 Infinity Autosampler

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|-------------------------------|---|
| Communications | Controller-area network (CAN), RS232C, APG-remote standard, optional four external contact closures and BCD vial number output. |
| Safety features | Leak detection and safe leak handling, low voltages in maintenance areas, error detection and display. |
| Injection range | 0.1 - 20 µL in 0.1 µL increments Up to 40 µL with separate 40-µL loop. Up to 100 µL with separate hardware*. |
| Injection precision | <0.25% from 5-40 µL <0.5% from 2-5 µL <0.7% from 0.5-2µL Injection accuracy: ± 1% (10 µL, n=10) |
| Sample viscosity range | 0.2 - 5 cp |
| Sample capacity | 2 x well-plates (MTP) + 10 ? 2 ml vials 108 x 2-mL vials in 2 x 54 vial plate plus 10 additional 2-mL vials 30 x 6-mL vials in 2 x 15 vial plate plus 10 additional 2-mL vials 54 Eppendorf tubes (0.5/1.5/2.0 mL) in 2 x 27 Eppendorf tube plate Compatible with the Agilent 1200 Series Sample Capacity Extension for further expansion of the sample capacity. |
| Injection cycle time | Typically < 21 s using following standard conditions: Default draw speed: 200 µL/min Default eject speed: 200 µL/min Injection volume: 5 µL |
| Carryover | Typically < 0.004 % using the following condition: Column: 2.1 x 50 mm ZORBAX SB C18, 1.8 µm Sample: Chlorhexidine dissolved in water + 0.1 % TFA Mobile phase: water + 0.05 % TFA, acetonitrile + 09.045 % TFA Flow rate: 0.5 mL/min Gradient: at 0 min 30 % B, at 3 min 60 % B Injection volume: 1 µL external needle wash with water + 0.1 % TFA, draw and inject speed = 100 µL/min Column temperature: 50 °C MSD API-ES positive: SIM ion 505.30 Fragmentor: 70 Gas temperature: 250 °C Drying gas: 12 L/min Vcap: 3000V |
| GLP features | Early maintenance feedback (EMF), electronic records of maintenance and errors. |

*100-µL loop, 100 µL analytical head (600 bar rating).

Ordering Details – Agilent 1200 Infinity Series Autosamplers

| Description | Product Number |
|--|----------------|
| Agilent 1260 Infinity Standard Autosampler Includes 100-vial (2-mL) thermostatted tray, 40-vial (2-mL) tray, 15-vial (6-mL) tray, electrically actuated 600-bar Rheodyne injection valve, and 0.5-m CAN cable. | G1329B |
| Expanded injection range with 900- μ L syringe, head, loop capillary and injector needle installed and tested in the sampler. | G1329B#020 |
| Multi-draw kit with loop capillaries to inject 500 and 1500 μ L volume | G1329B #021 |
| Agilent 1260 Infinity High Performance Autosampler Includes well-plate tray for two well plate and 10 x 2 mL vials, 2 x 54 (2 mL) vial plate, 600-bar Rheodyne injection valve, and 0.5-m CAN cable. | G1367E |
| Multi-draw kit with loop capillaries to inject 500 and 1500- μ L volume | G1367E#021 |
| 40 μL injection kit for RRLC. Includes loop and analytical head. | G1367E#040 |
| Agilent 1260 Infinity High Performance Micro Autosampler Includes micro autosampler with well-plate tray, 2 x 54 (2 mL) vial plate, electrically actuated Rheodyne micro injection valve, and 0.5 m CAN cable. | G1377A |
| Agilent 1260 Infinity Preparative Autosampler Includes 100-vial (2-mL) thermostatted tray, 15 x 6 mL half tray (2x), MBB Rheodyne injection valve and 0.5 m CAN cable. | G2260A |
| Agilent 1260 Infinity Dual Loop Autosampler Includes dual loop autosampler with two loops, tray for two well/vial-plates and 10 x 2 ml vials, Rheodyne injection valve. | G2258A |
| Agilent 1290 Infinity Autosampler Includes well-plate tray for two well plate and 10 x 2 mL vials, 2 x 54 (2 mL) vial plate, 1200-bar Rheodyne injection valve, and 0.5-m CAN cable. | G4226A |
| Agilent 1290 Series Thermostat Includes Peltier device to control the temperature of the Agilent 1200 Infinity Series autosamplers, fraction collectors and spotters. | G1330B |
| Agilent 1260 Infinity Manual Injector Includes 600-bar Rheodyne manual injection valve, 20 μ L sample loop and mounting stand. | G1328C |

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