

# Agilent 1260 Infinity Preparative-scale Fraction Collector

# Features, Technical Details, Specifications and Ordering Details



### Infinity Preparative-scale Fraction Collector

The Agilent 1260 Infinity Preparative-scale Fraction Collector is designed for optimized fraction collection in laboratories performing semiprepartive to preparative-scale purification with typical flow rates from 2 to 100 mL/min. It has been engineered to fit in the modular design of the Agilent 1200 Infinity LC family, occupying a minimum of benchspace and facilitating short tubing connections for minimized peak dispersion. A wide variety of collection tubes and well plates are available. For high-throughput applications, you can combine up to three fraction collectors in a single LC system. The optional 1260 Infinity Thermostat provides Peltier cooling for your thermally-labile chemical or biochemical samples.

#### **Features**

- Lowest delay volumes and optimized tubing minimize peak dispersion and carryover between fractions.
- Unique delay sensor makes it easy to determine delay volumes for accurate collection of fractions.
- Various collection strategies enable pooling of fractions from multiple injections.
- Multiple collection modes with fraction triggering based on time, peak or mass allow you to collect exactly the fractions you need.
- Large variety of trays gives you the flexibility to use well plates, Eppendorf tubes, and vials and test tubes of different heights and widths.
- Agilent Universal Interface Box (UIB) facilitates peak-triggered fraction collection with Agilent 1260 Infinity Evaporative Light Scattering, Fluorescence and Refractive Index Detectors, as well as non-Agilent detectors.
- System intelligence with CAN network processes data in real time for instantaneous and precise fraction collection.
- GLP features such as Early Maintenance Feedback (EMF), electronic instrument logbook, IQ and OQ/PV, as well as a 21 CFR Part 11 compliant software solution, help you comply with quality and regulatory standards.
- Forced fume extraction allows you to use the fraction collector outside a fume cupboard.



## Technical Details – Agilent 1260 Infinity Fraction Collectors

#### Lowest delay volume

The 1260 Infinity Fraction Collectors are designed for lowest delay volumes to avoid peak dispersion and carryover between fractions. This ensures highest recovery and purity for your fractions, especially when using low flow rates. The diagram shows the influence of delay volume on fraction recovery and purity.

#### Unique delay sensor

For accurate fraction collection you need to know the delay volume. A unique delay sensor makes determination of the delay volume an easy task. This delay sensor – comparable to a detector within the fraction collector – provides data to the Agilent ChemStation that calculates automatically the delay volume after the calibration measurement.

#### Multiple collection modes

The 1260 Infinity Fraction Collectors collect fractions automatically based on time, peak or mass. You can use any combination of time windows, thresholds, up and down slopes, upper thresholds and trigger sources such as UV or mass, or both. This allows you to collect exactly the fractions you need. The fraction preview function in the Agilent ChemStation software makes it easy to select the correct trigger parameters. Alternatively, you can use the 1200 Infinity Instant Pilot to collect fractions manually.

# Fraction collection containers for a variety of trays for well-plates, vials and test tubes

You can collect fractions ranging from small volumes in 96 and 384-well plates, up to unlimited volumes in 10, 40 or a maximum of 120 external vessels. Extended fraction collection capacity is facilitated by using up to three fraction collectors in parallel. Customization of trays with well-plate footprint allows you to use your own special sample containers up to a maximum height of 100 mm. Automatic tray recognition prevents test tube overflow.

#### Various collection strategies

If a sample volume is too large for a single injection, you can do pooling by making repetitive injections from the same sample container and collecting the resulting fractions in the same fraction positions. Predefined recovery locations ensure that nothing gets lost. If, for any reason, an important compound was missed during fraction collection, it is not lost but collected in the recovery location that you assigned to the sample.











## Specifications – Agilent 1260 Infinity Fraction Collectors

	Agilent 1260 Infinity Analytical-scale Fraction Collector	Agilent 1260 Infinity Preparative-scale Fraction Collector
Delay volume	Approximately 50 µL	Approximately 500 µL
Maximum system flow	10 mL/min, or up to 100 mL/min with semiprep needle and 0.8 mm tubing	100 mL/min
Fraction containers	<ul> <li>Shallow or deep well plates up to 48 mm height (96 or 384 format)</li> <li>Test tubes up to 48 mm height, or up to 75 mm height with semiprep needle</li> <li>Autosampler vials (2 mL and 6 mL)</li> <li>Eppendorf safe-lock tubes (0.5 mL, 1.5 mL, 2.5 mL)</li> </ul>	<ul> <li>96 deep well plates up to 48 mm height</li> <li>Test tubes, minimum 48 mm up to maximum 100 mm height (up to 45 mL)</li> <li>Autosampler vials (2 mL and 6 mL)</li> </ul>
Fraction trays	<ul> <li>Full trays</li> <li>4 well plates</li> <li>40 x 20 mL test tubes (30 mm od, 48 mm height)</li> <li>60 x 15 mL test tubes (25 mm od, 48 mm height)</li> <li>126 x 8 mL test tubes (16 mm od, 48 mm height)</li> <li>215 x 5 mL test tubes (12 mm od, 48 mm height)</li> <li>2 well plates + 10 x 2 mL vials (+ one possible additional half tray)</li> <li>2 well plates + 10 funnels for collection in external containers (+ one additional half tray)</li> <li>100 x 2 mL vials (+ one possible additional half tray)</li> </ul>	<ul> <li>Full trays</li> <li>4 well plates</li> <li>40 x 45 mL test tubes (30 mm OD, 100 mm height)</li> <li>60 x 32 mL test tubes (25 mm OD, 100 mm height)</li> <li>126 x 13 mL test tubes (16 mm OD, 100 mm height)</li> <li>215 x 7.5 mL test tubes (12 mm OD, 100 mm height)</li> <li>2 well plates + 10 x 2 mL vials <ul> <li>(+ one possible additional half tray)</li> </ul> </li> <li>100 x 2 mL <ul> <li>(+ one possible additional half tray)</li> </ul> </li> </ul>
	<ul> <li>Half trays (up to 3 per fraction collector)</li> <li>40 funnel tray</li> <li>15 x 6 mL vial</li> <li>40 x 2 ml vial</li> </ul> Tube plates for well plate trays <ul> <li>(2 or 4 per fraction collector depending on well plate tray):</li> <li>Eppendorf safe-lock tubes (27 x 0.5 ml, 1.5 ml or 2.5 ml)</li> <li>24 test tubes (18 mm OD)</li> <li>54 x 2 ml vial</li> <li>15 x 6 ml vial</li> </ul>	Half trays (up to 3 per fraction collector) • 15 x 6 mL vial • 40 x 2 ml vial <kein(e,r)> Tube plates for well plate trays (2 or 4 per fraction collector depending on well plate tray): Eppendorf safe-lock tubes (27 x 0.5 ml, 1.5 ml or 2.5 ml) 24 test tubes (18 mm OD) 54 x 2 ml vial 15 x 6 ml vial</kein(e,r)>
Fraction trays	Optional	Optional

Note: 2 mL vials are possible with preparative fraction collector but not recommended

Specifications common to both 1260 Infinity Fraction Collectors			
Trigger modes	Time slices and peak (threshold, up-/downslope, upper threshold and timetable), Boolean logic for different detector signals, combination of different modes, manual trigger (supported with 1200 Series Instant Pilot)		
Trigger source	Agilent 1200 Series VWD (only for analytical scale), MWD and DAD detectors, Agilent 6100 Series Quadrupole LC/MS, third party detectors (require UIB)		
Diverter valve	3/2 valve, switching time < 100 ms		
Maximum pressure	6 bar		
Maximum capacity	3 fraction collectors connected in parallel through a 12-position/13-port selection valve		
Environment	4 – 55 °C constant temperature, < 95% humidity (non-condensing)		

## Ordering Details – Agilent 1260 Infinity Fraction Collectors

Description	Product Number			
Agilent 1260 Infinity Fraction Collector PS (Preparative Scale) High flow version with short needle. For deep well plates and vials from 48 mm up to 100 mm in height. No tray included. Compatible with all fraction collection trays and tubes/vials up to 100mm in height. Trays G1367-60001 and G1313-44503 can also be used.	G1364B			
Agilent 1260 Infinity Fraction Collector AS (Analytical Scale) Version with long needle. Capillary optimized for delay dead volume. Includes fraction delay sensor. For well plates and vials up to 48 mm in height. No tray included. Compatible with all trays and tubes/vials up to 48 mm in height.	G1364C			
Low dispersion kit (0.15 mm tubing) for flow rates < 1 ml/min	G1364-68723			
Agilent 1260 Infinity Fraction Collector AS with semi-prep needle Version for containers up to 75 mm height. Can be used in combination with funnel trays. For high flow rates up to 100 ml/min preparative tubing is needed.	G1364C + G1364-87202 G1364-68711			
Trays for tubes, vials and well plates (Preparative Scale)				
Tray for 15 glass vials (6 mL), half tray (2/fraction collector possible)	G1313-44513			
Tray for 215 test tubes, 12 x 100 mm (max. height)	G1364-84516			
Tray for 126 test tubes, 16 x 100 mm (max height)	G1364-84525			
Tray for 60 round bottom tubes, 25 x 100 mm (max height)	G1364-84524			
Tray for 40 round bottom tubes, 30 x 100 mm (max height)	G1364-84523			
Tray for 2 well plates + 10 vials (2 mL) (well plate format: 96 – standard or deep well)	G2258-60011			
Tray for 4 well plates (well plate format: 96 – only deep well plates)	G1364-84521			
Plate inserts for usage with well plate trays (max 4/fraction collector)				
Plate for 18 mm OD tubes (24 tubes / plate)	5042-8544			
Trays for tubes, vials and well plates (Analytical Scale)				
Tray for 100 glass vials (2 mL)	G1329-60011			
Tray for 40 glass vials (2 mL), half tray	G1313-44512			
Tray for 15 glass vials (6 mL), half tray	G1313-44513			
Tray for 215 test tubes, 12 x 48 mm (max height)	G1364-84516			
Tray for 126 test tubes, 16 x 48 mm (max height)	G1364-84525			
Tray for 60 round bottom tubes, 25 x 48 mm (max height)	G1364-84524			
Tray for 40 round bottom tubes, 30 x 48 mm (max height)	G1364-84523			
Tray for 2 well plates + 10 vials (2 mL) (well plate format: 96 and 384 – only one type per tray!)	G2258-60011			
Tray for 2 well plates + 10 collecting funnels (well plate format: 96 and 384 – only one type per tray!)	G1364-84522			
Tray for 40 collecting funnels	G1364-84532			
Tray for 4 well plates (well plate format: 96 and 384 – only one type per tray!)	G1364-84521			
Plate inserts for usage with well plate trays (max 4/fraction collector)				
Plate inserts for usage with well plate trays (max 4/fraction collector)	5042-8544			
Plate for Eppendorf safe-lock tubes (27 tubes 0.5 mL, 1.5 mL, 2.5 mL)	5022-6538			
Plate for 6 mL vials	5022-6539			
Plate for 2 mL vials	G2255-68700			

#### www.agilent.com/chem/1200

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