

1 Installing the Fraction Collector

Site Requirements

Environment

Your fraction collector will work within specifications at ambient temperatures and relative humidity as described in [Table 1](#) and [Table 2](#) on page 15.

CAUTION

Do not store, ship or use your fraction collector under conditions where temperature fluctuations may cause condensation within the fraction collector. Condensation will damage the system electronics. If your fraction collector was shipped in cold weather, leave it in its box, and allow it to warm up slowly to room temperature to avoid condensation.

Table 1 Physical Specifications - Fraction Collectors (G1364B, G1364C)

Type	Specification	Comments
Weight	13.5 kg (29.8 lbs)	
Dimensions (height × width × depth)	200 × 345 × 440 mm (8 × 13.5 × 17 inches)	
Line voltage	100 – 240 VAC, ±10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ±5 %	
Power consumption (apparent power)	200 VA	Maximum
Power consumption (active power)	180 W	Maximum
Ambient operating temperature	4 – 55 °C (41 – 131 °F)	
Ambient non-operating temperature	-40 – 70 °C (-4 – 158 °F)	
Humidity	< 95 %, at 25 – 40 °C (77 – 104 °F)	Non-condensing
Operating Altitude	Up to 2000 m (6500 ft)	
Non-operating altitude	Up to 4600 m (14950 ft)	For storing the fraction collector
Safety standards: IEC, CSA, UL	Installation Category II, Pollution Degree 2. For indoor use only.	

Table 36 Performance Specifications Agilent 1200 Series ANALYTICAL SCALE Fraction Collector (G1364C)

Type	Specification
trigger modes	<p>Time slices, Peak (threshold, up- / downslope), Timetable (combination of time intervals and peak) and Manual trigger (supported only with G1323B Control Module)</p> <p>Agilent 1200 Series DAD/MWD detectors (G1315A/B/C, G1365 A/B/C), the Agilent 1200 Series fluorescence detector and the Agilent G1946C/D, G1956A/B LC-MSD are fully supported other detectors can be used but are not supported for fraction collection.</p>
operating modes	<p>Discrete fractions: default mode for all vessels. The flow is diverted to waste, while moving from one vessel position to the next vessel position</p> <p>Continuous flow: optional, available only when using the deep well plates. It is possible to move from one well plate position to the next one without diverting the flow into the well plate to waste</p> <p>Needle into location: Needle pushes into the vessel as deep as specified, for the use with capped vials and test tubes and well plates with closing mats</p> <p>Droplet setup mode: The tip of the fraction collector needle will initially move down to the bottom of the well. Then it will slowly move upwards while the fraction is collected. The droplet setup mode enables the fraction collector to collect small fractions without bubbles.</p>

7 Specifications

Performance Specifications for the Fraction Collectors

Table 36 Performance Specifications Agilent 1200 Series ANALYTICAL SCALE Fraction Collector (G1364C) (continued)

Type	Specification
fraction vessel capacities and trays	<ul style="list-style-type: none"> • 4 x well-plates full tray (MTP)* • 2 x well-plates std. tray + 10 funnels with external containers* (+ 1 half tray) • 2 x well-plates std. tray (MTP) + 10 x 2 ml vials* (+ 1 half tray) • 100 x 2 ml in std. tray (+ 1 half tray)* • 3 x 40 x 2 ml in half tray* • 3 x 40 funnels in half tray* • 3 x 15 x 6 ml in half tray* • Full tray with 40 test tubes (30 mm OD, max. height 48 mm, ~20 ml vol.) • Full tray with 60 test tubes (25 mm OD, max. height 48 mm) • Full tray with 126 test tubes (16 mm OD, max. height 48 mm) • Full tray with 215 test tubes (12 mm OD, max. height 48 mm) <p>Installed trays are automatically detected and identified. Installed plates and vials can be detected when operating in the needle into location mode</p> <p>* max. height can be extended by using the short needle assembly G1364-87202</p>
maximum tube / plate height	<p>48 mm with long needle assembly G1367-87200 75 mm with short needle assembly G1364-87202</p>
Maximum tube volume	<p>ca. 20 ml with 48 mm test tubes, ca. 30 ml with 75 mm test tubes or unlimited, if funnels are used with external containers.</p>
Maximum flow rate	<p>10 ml / min (depending on viscosity and generated back pressure, max. 6 bar at the diverter valve). The analytical scale fraction collector can be modified for flow rates > 10 ml/min.</p>
delay volumes [µl]	<p>Fraction collector inlet to diverter valve: ~50 (typical, depends on the length of the tubing) Diverter valve: ~15 Diverter valve to needle: ~10 Needle: ~4</p>
delay calibration sensor	<p>Single wavelength absorbance detector working at 654 nm, consisting of a LED and a photo diode</p>
diverter valve	<p>3/2 Diverter valve with low internal volume (15 µl), switching time < 100 ms, maximum operating pressure 6 bar</p>

Table 36 Performance Specifications Agilent 1200 Series ANALYTICAL SCALE Fraction Collector (G1364C) (continued)

Type	Specification
cooling	Optional (with additional G1330B), performance depending on ambient conditions and the volume of collected fractions
maximum capacity	3 fraction collectors in parallel plus one recovery fraction collector connected via 12-Position, 13-Port Selector valve (PN G1160A)
GLP features	Early maintenance feedback (EMF), electronic records of maintenance and errors
interfaces	<ul style="list-style-type: none"> - Controller-area network (CAN). - optional; LAN or external contacts interface - RS232C, - APG-remote (for remote start / stop signals to / from other modules) - Interface to G1330A Thermostat - CAN-DC-out for operation of Agilent approved external devices like valves
safety features	Leak detection and safe leak handling, error detection and display, exhaust fan for fume extraction of hazardous vapors

* Vials and well-plates and capped vials and well plates with closing mats can be used as recommended by Agilent Technologies (see “[List of Recommended Vials and Caps](#)” on page 165 and “[List of Recommended Plates and Closing Mats](#)” on page 168)

NOTE

Only one type of well-plates can be used at a time in one tray.