Agilent 1260 Infinity II Multicolumn Thermostat

Data Sheet

Product Description

The Agilent 1260 Infinity II Multicolumn Thermostat (MCT) facilitates precise column thermostatting over a broad temperature range with cooling down to 10 degrees below ambient and heating up to 85 °C. This capability provides robust and reliable separations for maximum application flexibility. Exchangeable high-pressure valves enable a wide range of applications such as column selection of up to four columns, sample preparation for analyte enrichment or matrix removal, or alternating column regeneration. The MCT matches perfectly with all InfinityLab LC Series systems and can also be combined with 1290 Infinity II Series modules as well as with previous 1260 Infinity and 1290 Infinity Series modules.

Features

- Superior usability with flexible flap positions: open door to 90 ° (desk function) or to 180 ° or even removal of the front door for maximum accessibility.
- Efficient, fast and most convenient column exchange through InfinityLab Quick Connect fittings.
- Reproducible precolumn solvent thermostatting with next generation InfinityLab Quick Connect heat exchanger easily installed for each column. A bio-inert heat exchanger is available for biological and extreme pH applications.
- Maximum application flexibility through Peltier cooling and heating with two independent temperature zones from 10 degrees below ambient up to 85 °C.
- Traceable column history with column identification to track history of up to four columns for documentation of column type, major column parameters, and number of injections as standard for GLP.
- Optional valve drive to host user-exchangeable InfinityLab Quick Change valve heads of different formats, which are also available in bio-inert materials.

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Specifications

Table 1   Physical Specifications

Type	Specification	Comments
Weight	12.5 kg (27.6 lbs)	
Dimensions (height × width × depth)	160 x 435 x 436 mm (6.3 x 17.1 x 17.2 inches), Width with column identification kit: 460 mm	
Line voltage	100 – 240 V~, ± 10 %	Wide-ranging capability
Line frequency	50 or 60 Hz, ± 5 %	
Power consumption	150 VA, 150 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 Multicolumn Thermostat (G7116A)

Feature	Specification
Operating principle	Thermostatted column compartment with dual, independent Peltier-element. Solvent pre-heating and still-air operation for reduction of chromatographic band-broadening under UHPLC-conditions.
Temperature range	10 °C below ambient (minimum 4 °C) to 85 °C settable in steps of 0.1 K
Temperature stability	±0.1 °C
Temperature accuracy	±0.5 °C (with calibration for 40 °C)
Temperature precision	0.05 °C
Independent Temperature zones	2 in single device
Column capacity	4 columns of up to 300 mm length plus InfinityLab Quick-Connect fittings or pre-column The number of precolumn Quick-Connect Heat Exchangers is scalable - each column can be equipped with individual heat exchanger for best performance 4-column selector valve is available to access each column without replumbing
Heat-up/cool-down time	5 min from ambient to 40 °C 10 min from 40 °C to 20 °C <25 min from 25 °C to 85 °C
Solvent heat exchangers	For pre-column solvent heating, G7116A is equipped with a Quick-Connect Heat Exchanger Large ID (0.17 mm capillary, 3 µL internal volume) as default. Other dimensions of Quick-Connect Heat Exchangers are optionally available, as well as heat exchangers made from bio-inert materials (metal-free).
Valve options	1 x integrated valve drive as option to host user-exchangeable Quick-Change valve heads (up to 800 bar) of different formats: 2-position/6-port, 2-position/10-port, 4-column selection. Also available in bio-inert materials. Valve heads are automatically identified by their tag.
Column identification	Optionally, column identification kit to track history of up to four columns. Mounted left hand-side of module.
Instrument Control	LC and CE Drivers A.02.14 or above Instrument Control Framework (ICF) A.02.04 or above Agilent Instant Pilot (G4208A) B.02.20 or above InfinityLab LC Companion (G7108A) Lab Advisor B.02.08 or above
Communications	Controller-area network (CAN)

Table 2   Performance Specifications 1260 Infinity II Multicolumn Thermostat (G7116A)

Feature	Specification
Maintenance and safety-related features	Extensive diagnostics, error detection and display with Agilent LabAdvisor software. Leak detection, safe leak handling, leak output signal for shutdown of pumping system, low voltages in major maintenance areas.
GLP features	Valve heads carrying tags with serial number, pressure rating, number of switches and valve type. Concept of column identification.
Housing	All materials recyclable.

Ordering Details

Table 3   Ordering Details 1260 Infinity II Multicolumn Thermostat

Description	Part Number
1260 Infinity II Multicolumn Thermostat	G7116A
Add option for valve drive.	G7116A#058
Add option for one Quick Connect heat exchanger large id and four column holder clips.	G7116A#062
Add option for one Quick Connect heat exchanger large id HF (2.5 mL/min and higher) and four column holder clips.	G7116A#063
Add option for accessory kit with bio-inert Quick Connect heat exchanger.	G7116A#019
Heating room divider	G7116-60006
Four column selector valve head, 800 bar, for use in G7116A.	G4237A
Upgrade kit to equip an existing G7116A with a column identification kit.	G4750A

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