

# Agilent 1290 Infinity Thermostatted Column Compartment

## Features, Specifications and Ordering Details



# Precise column thermostatting with maximum application flexibility

The Agilent 1290 Infinity Thermostatted Column Compartment facilitates precise column thermostatting over a temperature range from 10 degrees below ambient up to 100 °C, providing infinite flexibility for optimizing the speed and selectivity of a separation. Ultra high pressure valves enable a wide range of solutions like dual or multi-column selection, sample preparation, or alternating column regeneration. The 1290 Infinity TCC is also the basis for multi-method solutions and can be used together with 1290 Infinity LC and 1260 Infinity LC systems as well as with existing 1200 Series LC and RRLC or even 1100 Series LC systems.

#### Features

- $\bullet$  Temperature precision specification of  $\pm$  0.05 degrees for repeatable retention times and peak areas
- Maximum application flexibility through Peltier cooling and heating for two independent temperature zones from 10 degrees below ambient up to 100 °C
- Low dispersion optimized for low internal volume contribution
- Spacious column racks provide room for three 30 cm columns or a couple shorter columns
- Ultra high pressure valves for many applications such as alternating column regeneration, sample preparation, and dual or multi-column selection
- Unique pull-out and Quick Change Valve design for easy plumbing and valve exchange
- Clustering of up to three 1290 Infinity TCC modules for maximum flexibility for multi-method applications like automated method development
- Further features include a door-open sensor, improved thermal insulation, leak funnel and capillary guide



#### Specifications – Agilent 1290 Infinity Thermostatted Column Compartment

Temperature range	10 degrees below ambient to 100 °C	
Temperature stability	± 0.05 °C	
Temperature accuracy	0.001 – 10 mL/min, in 0.001 mL/min increments	
Temperature zones	2 (single TCC) 4 (dual-TCC cluster) 6 (triple-TCC cluster) Individual stand-by temperatures definable for cluster configurations!	
Column capacity	<ul> <li>2 columns of 300 mm length with individual solvent heating</li> <li>3 columns of 300 mm length in series</li> <li>4 columns of 100 mm length each with individual low dispersion heat exchanger</li> <li>6 columns (max. 300 mm) with triple-TCC clustering and column selection valves</li> <li>8 columns (max. 100 mm) with dual-TCC clustering and column selection valves</li> </ul>	
Heat-up/cool-down time	5 min from ambient to 40 °C 10 min from 40 °C to 20 °C	
Internal volume	<ul> <li>With low dispersion heat exchangers:</li> <li>1.6 μL for heating</li> <li>1.5 μL for optional post-column cooler</li> <li>With standard heat exchangers:</li> <li>3 μL left heat exchanger</li> <li>6 μL right heat exchanger</li> </ul>	
Valve options	Optionally integrated Quick-change valve drive with radio frequency identification of optional valve heads with different pressure ratings: 2-position/6-port (up to 1200 bar), 2-position/10-port (up to 1200 bar), 8-column selection valve-kit (up to 1200 bar).	
Communications	Controller-area network (CAN), RS 232, APG remote: ready, start, stop and shut-down signals	
Safety and maintenance	Extensive diagnostics, error detection and display (through Instant Pilot control module and Agilent LabAdvisor), leak detection, safe leak handling, leak output signal for shutdown of pumping system. Low voltages in main maintenance areas. Door-open sensor.	
GLP	Column identification module for GLP documentation of column type. Valves carrying RFID-tags with serial number, pressure rating, number of switches and valve type.	
Housing	All materials recyclable	
Dimensions (h x w x d)	140 x 410 x 435 mm, (5.5 x 16 x 17 inches)	

\* Specifications are valid for distilled water at ambient temperature (25 °C) setpoint a 40 °C and a flow range from 0.1 to 5.0 mL/min, for the temperature range above 80°C the specifications are valid for a flow range from 0.1 to 2.5 ml/min.

#### Ordering Details – Agilent 1290 Infinity Thermostatted Column Compartment

	Description	Product Number
	Agilent 1290 Infinity Thermostatted Column Compartment	G1316C
	Installed valve drive for flexible installation of separately available valve heads	G1316C #058

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