

TL-105 HPLC Column Heater



Features and Benefits:

- **Extra Large Heated Cavity Accommodates Multiple Analytical or Preparative Columns**
- **Built-in Heat Exchanger Preheats the Mobile Phase Reducing Temperature Gradients**
- **Accommodates either an Internal or external Injection or column switching Valve**
- **Easy Access to Heated Cavity**

The Timberline TL-105 is a multi-feature HPLC column heater designed to meet the needs of busy chromatography labs. The TL-105's microprocessor controlled heating provides stable and accurate temperature control, reproducible retention times and stable baselines for temperature sensitive detectors such as refractometers, electrochemical, and conductivity. Increasing column temperatures reduces peak tailing due to surface silanol interactions, improves efficiency, reduces backpressure, and prevents column contamination.

An optional injection or switching valve can be mounted in the heated compartment. Heating the valve provides sample and mobile phase pre-heating. Multiple columns can be stored in the TL-105 and conveniently selected via a switching valve. This saves time by eliminating the need to disconnect and reconnect fittings and waiting for column temperature equilibrium.

The column, pre-heater, and installed valves in the heated cavity are easily accessed through an insulated cover held in place on the top of the unit with thumbscrews. Inadvertent solvent leaks are easily detected and directed away from heater electronics via a drain tube in the heated compartment connected to a bulk head fitting on back of unit.



Internal view of TL-105 Column Heater

The extra large heated cavity accommodates multiple analytical or semi-preparative HPLC columns. Column and guard column combinations can be up to 50cm long. Numerous columns can be stacked into the 2 ¾" deep cavity. A built-in heat exchanger preheats the mobile phase and reduces temperature gradients within the column, improving chromatographic efficiency. In the unlikely event of a control failure, a thermal fuse cuts power to the heater to safe guard the heater, column and laboratory.

Specifications

Case Dimensions TL-105 and TL-105-HT	8"W x 20.0"L x 5"H
Case Dimensions TL-105L and TL-105L-HT	8"W x 25½"L x 5"H
Heated Cavity Dimensions TL-105 and TL-105-HT	3½"W x 17.5"L x 2¾"H
Heated Cavity Dimensions TL-105L and TL-105L-HT	3½"W x 23.0"L x 2¾"H
Inlet Pre-heater	0.0625"OD x 0.010"ID x 30" SS coil cast in tin alloy.
Heating Elements	Etched Foil/Silicon, 150W
Temperature Range TL-105 and TL-105L	5°C above ambient to 100°C
Temperature Range TL-105-HT and TL-105L-HT	5°C above ambient to 160°C
Temperature Stability	+/- 0.1°C
Operating Voltage	120 VAC or 240 VAC (Must be specified by customer)

Ordering Information

TL-105 Column Heaters	Catalog Number
TL-105 Column Heater, 120VAC	2105-1
TL-105 Column Heater, 240VAC	2105-2
TL-105 Long Column Heater, 120VAC	2115-1
TL-105 Long Column Heater, 240VAC	2115-2
TL-105-HT (High Temp) Column Heater, 120VAC	2125-1
TL-105-HT (High Temp) Column Heater, 240VAC	2125-2
TL-105-HT (High Temp) Long Column Heater, 120VAC	2135-1
TL-105-HT (High Temp) Long Column Heater, 240VAC	2135-2
Heat Exchangers	Catalog Number
HX-101, SS, 1/16" OD x 0.01"ID x 23.5"L	2201
HX-102, SS, 1/16" OD x 0.02"ID x 23.5"L	2202



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