

## Column Heater

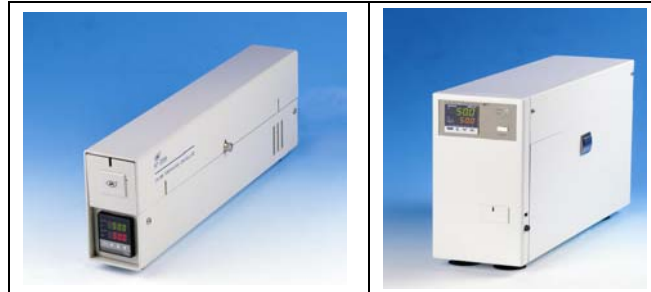
### HT SERIAL COLUMN HEATER

- 1.HT-130
- 2.HT-330
- 3.HT-220A
- 4.HT-230A
- 5.HT-430A
- 6.HT-560
- 7.HT-660
- 8.HCT-360

### AT SERIAL COLUMN HEATER

- 1.AT-130
- 2.AT-130L
- 3.AT-132
- 4.AT-330
- 5.AT-350
- 5.AT-530
6. AT-630
- 6.AT-830
- 7.AT-930

## HT SERIAL COLUMN HEATER



HT-220A

HT-660



HT-130



HT-230A



HT-560



HCT-360

## HT SERIAL COLUMN HEATER

### Specifications:

Item	Specifications						
<b>Accuracy</b>	1. Temperature range: Heating type: ambient to 99°C Cooling type: approx 15 to 20°C below actual ambient to a minimum of 0°C 2. Stability: $\pm 0.1^\circ\text{C}$ 3. Accuracy: $\pm 0.5^\circ\text{C}$ (at 50°C) 4. Set point: 0.1°C increment						
<b>Control</b>	1 Design and actual temperature dual-display 2. High-temperature alarm can be set and 90°C is in common.						
<b>Products</b>	<b>Model</b>	<b>Structure</b>	<b>Power</b>	<b>Outside Size (mm)</b>		<b>Net Weight (kg)</b>	<b>Column Max. No. and length</b>
				<b>Controller</b>	<b>Heater</b>		
	HT-130	Horizontal, two parts	120W	165×206×85	495×75×85	6	2 columns, 300m
	HT-330	Wide horizontal, two parts	180W	130×165×70	450×110×70	7.5	3 columns, 300m
	HT-220A	Unified one horizontal set, can hold sample inserting valve	180W	450×75×150		7.5	2 columns, 250m
	HT-230A	Unified one set, flexible with horizontal and vertical setting	150W	450×110×490		8.5	2 columns, 250m
	HT-340A	Unified one horizontal set	200W	260×450×80		6.5	3 columns, 300m
	HT-560 (for Shimadzu)	Unified, can hold sample inserting valve	200W	260×450×80		7	3 columns, 300m
	HT-660 (for Shimadzu)	Unified one vertical set, can hold sample inserting valve, flowing pool	200W	260×450×80		7	4 columns, 300m
HCT-360	Unified a horizontal set, with cooling and heating function	300W	260×430×150		9.5	4 columns, 300m	
<b>Others</b>	1. working environment temperature: 0°C–50°C; 2. Store and transport temperature: -20°C–70°C						

**AT SERIAL COLUMN HEATER**



**Specifications:**

	AT-130	AT-130L	AT-132	AT-330	AT-530	AT-830	AT-930
Temperature range	Ambient to 100 °C	Ambient to 100 °C	Ambient to 100 °C	Ambient to 100 °C	Ambient to 85 °C	room temperature below-25° C-75° C	room temperature below-22° C-75° C
Max. Temperature	110 °C	110 °C	110 °C	110 °C	95 °C	80 °C	80 °C
set/display	4-digit LED dual-display					3-digit LED dual-display	
set temperature	0.1 °C	0.1 °C	0.1 °C	0.1 °C	0.1 °C	1 °C	0.1 °C
Temperature precision	0.1 °C	0.1 °C	0.1 °C	0.1 °C	0.1 °C	0.5 °C	0.5 °C
Temperature stability	0.1 °C	0.1 °C	0.1 °C	0.1 °C	0.1 °C	0.3 °C	0.3 °C
Inner Size	45X33X420	45X26X330	45X60X420	45X35X330	82X48X405	45X26X330	45X26X330
Outside Size	75DX68HX495W	75WX62DX455H	132DX68HX470W	64WX106DX455H	260WX135HX420D	185DX108HX400W	185DX108HX490W
Power	150W	125W	160W	125W	180W	150W	150W
Column No.	1-2	1-2	1-2	1-2	2-3	1-2	1-2

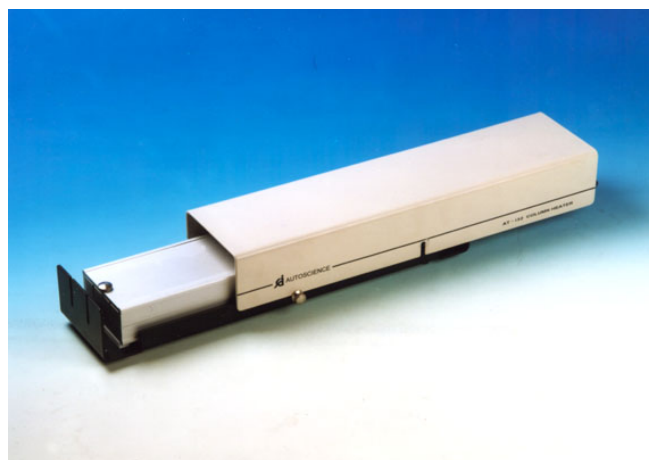
## AT SERIAL COLUMN HEATER



**Placement:** this vertical column heater matches other HPLC equipment with stacked placement.

**Easy View:** crystalline window allows easy viewing inside HPLC columns.

**Convenient:** magnetic elements create easy opening and closing of the column heater's cover.



**AT-132 Column Heater**

**The column heater holds 2-4 HPLC Columns.**

**Horizontal column heater.**



AT-130 Column Heater

Horizontal column heater, and the unified design makes arrangement of column heater and matching HPLC system easy and convenient.

At-130 can hold 1~2 of 300ml HPLC columns.



AT-330A Column Heater

- ◆ Unified design makes this column heater's arrangement flexible with horizontal or vertical setting.
- ◆ Accreted temperature control and display: Two four digit LED display can make Temperature control accuracy to  $\pm 0.1^{\circ}\text{C}$ .
- ◆ Fast and easy installation of column: Magnetic elements create easy opening and closing of the column heater's cover.
- ◆ Easy view: Crystalline window allows easy watch inside the HTLC column.
- ◆ Safety free-leaking design: A box placed under heating chamber can prevent liquid from leaking.
- ◆ Flexible column placement: Provide stainless clamp holder inside heating chamber to make it easy for installing the column under heating.
- ◆ Smooth pipe: Provide smooth connection between input and output ports to guarantee that liquid passes through.
- ◆ Stable column heater base : Provide additional large size base that can be mounted with column heater once required to stabilize the column heater
- ◆ When place it vertically.
- ◆ Convenient sample inserting valve component kits: Sample-inserting valve can be fixed at any height of the column heater.



**AT-830/930 Cooling & Heating Column Heater**

**Versatile:** the cooling system makes the column heater very versatile.

**Powerful:** the cooling power of the AT Serial Column Heater can cool the temperature inside heating chamber lower than the room temperature by 25°C.

**Convenient:** comes with temperature setting knobs and LED that displays the actual temperature.

**Accurate:** experiments shows a temperature controlling accuracy of  $\pm 0.3^{\circ}\text{C}$  and better.

**Intelligence:** the temperature controlling system can automatically change between heat and cool based on the room and set temperature.

**Flexibility:** easy to change installation direction for making, arrangement of column heater vertical or horizontal, and the unified design makes arrangement of column heater as well as matching with HPLC system and matching HPLC system easy and convenient.



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### AT-630 Column Heater

**Super size of the column heater: Ambient size: 145mmW × 380 mm H × 110 mm D.**

**Note: Height (H) can be chose by three different sizes.**

**Big power of the fan speed up the heat process: the functionary of the fan make complete circulation of the heat.**

**Accurate temperature control and display: microprocessor controlled temperature device has two 3 digital LED display make the temperature control accuracy to +0.1°C.**

**Fast installation:**

**Easy monitor: provide a watch window on the heat ambient to monitor the heat process.**

**Leaking Box: provide a box under heater to prevent liquid leaking.**

**Smooth pipe: make a smooth connection with input and output port to guaranty that liquid pass through.**

**AT-530 Column Heater**



**Spacious:** The integrative design of column heater makes it easy for stacking and storing with other equipment, thus, reducing bench space requirements.

**Convenient:** AT-530 Column Heater is designed for a quick, easy access to column chamber without removing the heater cover.

**Accurate:** can upgrade the analysis accuracy through installation of injector in the column chamber.

**Quick Read:** Two 4-digit LED displays the “Set” and “Actual” temperature.

**Safe:** automatically power down when overheating.



### **AT-130 Digital Temp. Controller**

**The AT-130 Temperature Controller can be used with AT-130, AT-130L, AT-132 Column Heaters.**

**Easy:** the separate designing of column heater and temperature controlling allows easy placement with multi-kind HPLC system.

**Quick Read:** two 4-digit LED displays the Set and Actual temperature.

**Safe:** warns of overheating as well as automatic power off when overheating.