

Digi-Sense® Benchtop Temperature Control Consoles

Direct plug-in of heating or cooling devices

TC9000 Model (Thermocouple)

- Simple on/off to sophisticated PID control
- Simultaneous view of both the measured and set point on the two-line alphanumeric display
- Offset function allows you to correct for probe error
- Front panel indicates output and alarm conditions
- Mount to lab frame or grid with built-in support bracket

TC9500 Data Logging Model (Thermocouple, RTD, Thermistor)

Offers all the features of the Temp 9000 controller, plus nine-segment ramp and soak profiling for more complex processes, USB computer interface, and free software that features real-time visual of set points and process activity, along with data logging.

- Ramp rate and ramp-and-soak profiling for more complicated processes
- USB computer interface and free software that features real-time graphing and programming setup
- Data log more than 100 K data points in adjustable increments from 1 second to 999 seconds



Model	Temperature probe inputs	Heater/cooler output (50/60 Hz) ^{††}	Heater/cooler output load	Power ^{††}	Catalog number	Price
TC9000	Thermocouple	120 VAC	15 A max, 1800 W	120 VAC	GH-89800-01	
		240 VAC	105 A max, 2300 W	230 VAC	GH-89800-02	
TC9500	Thermocouple, thermistor, RTD	120 VAC	15 A max, 1800 W	120 VAC	GH-89800-03	
		240 VAC	10 A max, 2300 W	230 VAC	GH-89800-04	

^{††}For 230 VAC models the power and heater/cooler output uses IEC plugs. You may need to order an adapter sold separately, for your local requirements.



Probe not included



Specifications

Input type	Range
J	–190 to 1000°C (–310 to 1832°F)
K	–200 to 1372°C (–328 to 2502°F)
T	–200 to 400°C (–328 to 752°F)
E	–200 to 1000°C (–328 to 1832°F)
N	–200 to 1300°C (–328 to 2372°F)
B	200 to 1800°C (392 to 3272°F)
R	0 to 1768°C (32 to 3214°F)
S	0 to 1768°C (32 to 3214°F)
Thermistor [†]	400 series: –30 to 100°C (–22 to 212°F)
	700 series: –15 to 100°C (5 to 212°F)
100 Ω Pt RTD [†]	–200 to 800°C (–328 to 1472°F)

[†]Temp 9500 model only.

Resolution: 0.1°; 1° above 999.9° and below –99.9°

Accuracy: [span equals 540°C (1000°F) min]

Types J, K, T, E, and N: ±0.1% of span

Types B, R, and S: ±0.2% of span

Thermistor: ±0.4% of span 0.5°C (0.7°F)

RTD: ±0.1% of span

Alarm output (9500 only): SPT relay rated for 24 VAC, 1 A max

Communication (9500 only): USB

Digi-Sense® Benchtop Ramp/Soak Controllers

Programmable up to 40 steps

- Customize your interface and data collection with included software
- Program temperature, time, hold, soak, and end steps
- Don't overshoot process temperature with auto-tune function

Controller features an audible alarm function, selectable temperature scale, and one panel-mounted receptacle that accepts a three-prong plug. Select from models for types J, K, or T thermocouples with miniconnectors, or 100 Ω Pt RTD probes. To save bench space, mount the unit to a support pole or lattice using the included bracket.

What's included: software, 6-ft (1.8-m) detachable power cord, and lattice support bracket.

Specifications

Resolution: 1°, 1.0°, or 1.00° selectable

Accuracy: 0.1% of span, ±1.0°F/°C

Load ratings: 1500 watts resistive, 12.5 amps

Control output: Solid-state relay

Alarm output: Yes

Ramp/soak: 40 total steps

Recorder output: RS-232



Input type	Range	Power (60 Hz)	Catalog number	Price
J	–328 to 2192°F (–200 to 1200°C)	120 VAC	GH-36225-66	
K	–328 to 2498°F (–200 to 1370°C)		GH-36225-67	
T	–328 to 752°F (–200 to 400°C)		GH-36225-68	
RTD	–328 to 1472°F (–200 to 800°C)		GH-36225-69	

[GH-17101-63](#) NIST-traceable recalibration with data