



## Resistor Baths

## Models 7015, 7009, and 7108

- Three size options for any quantity of resistors
- Stability to  $\pm 0.0007^{\circ}\text{C}$
- Set-point resolution to  $0.00003^{\circ}\text{C}$
- Minimal long-term drift

Regardless of the size and number of standard resistors you have to maintain, Hart has a bath that will do the job for you. Choose one of the three models described here or call us for information on other sizes.

Like all Hart baths, these resistor baths have unbeatable stability and uniformity. No other baths limit long-term and short-term drift—as well as gradients—better than these baths. Hart's proprietary controller senses temperature changes as small as  $0.00001^{\circ}\text{C}$ . This controller is the industry's best-selling temper-

ature calibration controller for bath retrofits because it improves the stability of almost every other poorly performing bath. So why not buy the best to begin with?

Each bath can be delivered with any size resistor rack you want (a standard model is included with each bath), and the Model 7015 has several other special features that make your work easier.

### Model 7015

The Model 7015 has a 95-liter tank and a temperature range of  $0^{\circ}\text{C}$  to  $110^{\circ}\text{C}$ . It's stable to  $\pm 0.0007^{\circ}\text{C}$ .

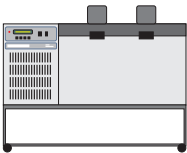
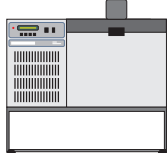

It has a one-piece stainless steel lid designed to drain spills and splashes back into the bath as you remove resistors. It has a large access opening to make handling large resistors, like the Thomas Design Standard resistors, easier. The tank has an electrically isolated resistor shelf.

This is truly a quality resistor bath, and it's backed by Hart's industry-leading service.

### Model 7009

This is a large bath with a tank  $27\frac{1}{2}$  inches long by 22 inches wide. It has a temperature range of  $0^{\circ}\text{C}$  to  $110^{\circ}\text{C}$  and a stability of  $\pm 0.0007^{\circ}\text{C}$ .

For a bath this size and with these specs, it is priced extremely well. The Model 7009's large tank can handle many resistors of any size.

Specifications	7015	7009	7108
			
Range	0°C to 110°C	0°C to 110°C	20°C to 30°C
Stability at 25°C	±0.0007°C (water) ±0.001°C (mineral oil 5011)		±0.002°C (water) ±0.004°C (mineral oil 5011)
Uniformity	±0.003°C at 25°C (water) ±0.005°C at 25°C (mineral oil 5011)		±0.005°C (water) ±0.008°C (mineral oil 5011)
Temperature Setting	Digital display with push-button data entry		
Set-Point Resolution	0.002°C; high-resolution mode, 0.00003°C		
Display Resolution	0.01°C		
Digital Setting Accuracy	±1°C		±0.5°C
Digital Setting Repeatability	±0.01°C		
Heaters	500 and 1000 Watts		Peltier heating/cooling
Cooling Capacity	100 to 200 Watts		100 W in ambient 23°C
Access Opening	27.5" x 11" (699 x 279 mm)	27.5" x 22" (669 x 559 mm)	14" x 14" (356 x 356 mm)
Bath Chamber Dimensions (unobstructed space)	27.5" W x 11" H x 13" D (3933 cubic inches)	27.5" W x 22" H x 13" D (7865 cubic inches)	14" W x 8" H x 14" D (355 x 203 x 355 mm)
Depth	13" (331 mm)		8" (203 mm)
Wetted Parts	304 stainless steel		Tank: 304 stainless steel Resistor rack: hard-anodized, perforated aluminum
Safety Cutout	Factory-set high temperature		n/a
Power	115 VAC (±10%), 60 Hz, 15 A or 230 VAC, 50 or 60 Hz, 8 A, specify	230 VAC (±10%), 50 or 60 Hz, 12 A (specify frequency)	115 VAC (±10%), 50/60 Hz, 3 A or 230 VAC (±10%), 50/60 Hz, 1.6 A, specify
Volume	25 gallons (95 liters)	44 gallons (167 liters)	13.2 gallons (51 liters)
Weight	310 lb. (141 kg)	330 lb. (150 kg)	75 lb. (35 kg)
Size	48" H x 44" W x 22" D (1219 x 1118 x 559 mm)	43" H x 44.5" W x 34" D (1092 x 1130 x 864 mm)	19.25" W x 22" H x 25" D (489 x 413 x 559 mm)
Automation Package	Interface- <i>it</i> software and RS-232 computer interface are available for setting the bath temperature via an external computer. (Both come standard with a 7108.) For IEEE-488, add the 2001-IEEE to the automation package.		

## 7108

This is the quietest resistor bath you've ever heard. The 7108 uses thermoelectric (Peltier) modules to provide heating and cooling over its range from 20°C to 30°C. Without a compressor, noise is dramatically reduced. Power requirements are also lower, so you save money running the bath and add less heat load to your lab.

With a 13.2-gallon (51-liter) tank, the 7108 holds plenty of resistors. A large 14" x 14" (356 x 356 mm) access opening allows you to easily move resistors in and out of the bath. A resistor rack comes with each unit that fits across the bottom of the tank. Made from hard-anodized perfo-

rated aluminum, this rack maintains the necessary electrical isolation between your resistors.

Hart baths have been used in primary temperature and electrical labs for years. Why shouldn't they be? They're the most stable baths in the world. Now they're even better. Try one.



Need a reliable standard resistor? See our selection on pages 28 and 29.

## Ordering Information

7015	Resistor Bath
7009	Resistor Bath, high capacity
7108	Resistor Bath, Peltier-cooled, includes RS-232
2001-7015	Automation Package for 7015
2001-7009	Automation Package for 7009
2001-IEEE	Add for IEEE-488 (requires Automation Package)
5011	Mineral Oil

# Cal Power

Via Acquanera, 29 22100 COMO  
tel. 031.526.566 (r.a.) fax 031.507.984  
info@calpower.it www.calspower.it