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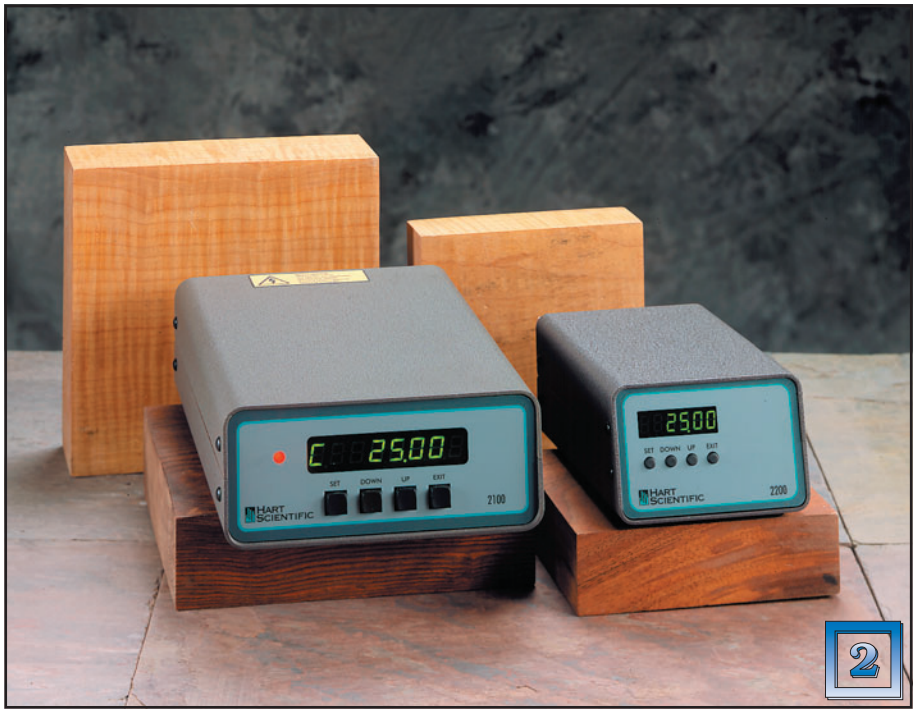
BENCHTOP CONTROLLERS Models 2100 and 2200



Benchtop Controllers Models 2100 and 2200

- Most stable temperature controllers available
- Resolution as high as 0.00018°C
- RS-232 interface included for automating applications

It's no secret why Hart's temperature baths are the most stable baths in the world. In fact, right on page 92 of this catalog we explain that Hart baths use Hart temperature controllers, and they're flat out the best anywhere.

If you're using a homemade bath—or worse, a bath built by one of our competitors—there's a good chance you can drastically improve its performance by using one of Hart's two temperature controllers.

The Model 2100 controller can sense and respond to temperature changes as low as 0.00001°C, which means you can enjoy stabilities better than ±0.001°C in a mechanically sound bath.

The 2100 has set-point resolution of 0.002°C using a thermistor input and 0.01°C using an RTD input. In high-resolution mode you can adjust the set-point in increments smaller than 0.0002°C. Actual display resolution is 0.01°C.

Power output is provided on a standard IEC female power receptacle. An auxiliary power output provides constant line voltage to equipment accessories such as stirrers.

The Model 2200 controller is smaller and lighter than the 2100 and uses an RTD input to provide stabilities as good as ±0.015°C. Resolution is 0.01°C and temperature range is –100°C to 800°C.

If operated from any line power between 100 and 230 VAC, 50 or 60 Hz, the 2200 will supply up to 10 amps power output on a standard IEC female power receptacle.

Both models are programmed using the front-panel buttons and also come with an RS-232 interface.

Either of these benchtop controllers can turn an average temperature bath into a true calibration tool. Call us and tell us your application. We'll help you pick the best controller for your situation.

Specifications

Temperature Range	**2100:** –100°C to 670°C **2200:** –100°C to 800°C
Control Stability	**2100:** ±0.0005°C to ±0.002°C **2200:** ±0.005°C to ±0.02°C (depends on system design)
Display Accuracy (with probes shown below)	±1.0°C without system calibration
Display Resolution	0.01°
Set-Point Resolution	**2100:** 0.0002° in high-resolution mode **2200:** 0.01°
Auxiliary and Heater Output	**2100:** 100–125 nominal VAC or 230 nominal VAC (internally switchable), 50/60 Hz, 10 A max. **2200:** 100–230 VAC, 50/60 Hz, 10 A max.
Heater Output	Solid-state relay
Dimensions	**2100:** 2.83" H x 6.75" W x 9.86" D (72 x 172 x 250 mm) **2200:** 2.85" H x 4.5" W x 7" D (72 x 114 x 178 mm)
Probes	2620: RTD, 11" x 0.187" (280 x 4.8 mm), –100 to 550°C 2622: RTD, 9" x 0.187" (229 x 4.8 mm), –100 to 550°C 2624: RTD, 14" x 0.187" (356 x 4.8 mm), –100 to 550°C 2611: Thermistor, 9" x 0.218" (229 x 5.5 mm), –10°C to 110°C (2100 controller only) 5635: Type K thermocouple, 16" x 0.187" (406 x 4.7 mm), 1100°C for cutout
Automation Software	Both models include Hart's 9930 Interface-*it* software package (see page 74)

Ordering Information

2100	Controller
2200	Controller
2125	IEEE-488 Interface
2611	Thermistor Probe
5635-S	Thermocouple Cutout Probe
2620	RTD Probe, 11"
2622	RTD Probe, 9"
2624	RTD Probe, 14"

Read about our calibration training courses on page 153.