

# Pelt-5 Temperature Controller

Sophisticated standalone temperature controller for Peltier Effect units

The Sable Systems **PELT-5** Peltier Effect Temperature Controller, plus one of our Peltier-effect cabinets or drop-ins (or your own custom Peltier effect setup) forms a complete temperature control system. The PELT-5 controller is a sophisticated standalone temperature controller that drives noiseless, vibration-less and highly reliable solid-state heat pumps (i.e Peltier Effect units), allowing them to regulate the temperature of practically any small object or space over the range of -5 to +65°C, depending on configuration and ambient temperature.



## FEATURES

Standalone temperature controller

Drives solid state heat pumps, allowing them to regulate the temperature of small objects or space over the range of -5 to +65°C

Designed to ramp, step, soak or maintain the set temperature of Sable Systems Pelt Cabinet, Pelt Plate, or Pelt Drop-in

# Pelt-5 Temperature Controller

## SPECIFICATIONS

<b>CONTROL ALGORITHM</b>	PID (Proportional-Integral-Derivative) control for optimum stability; all PID parameters are adjustable by user
<b>CONTROL OPTIONS</b>	Standalone (single setpoint, programmable ramp, or programmable step) or external serial control or digital input
<b>CONTROL STABILITY</b>	Depends on placement of temperature sensor; 0.01 – 0.2°C peak to peak typical; < 0.02°C RMS typical
<b>DIGITAL INPUT</b>	BNC, optically isolated, 2-30 VDC for logic 1 (heat), less than 1.2V for logic 0 (cool), reverse polarity protected.
<b>DISPLAY</b>	Digital, 2 x 16 alphanumeric LCD; displays setpoint and cabinet temperature to 0.01°C.
<b>PELTIER DEVICE OUTPUT</b>	11-18 VDC at the appropriate polarity, at up to 8 amperes plus continuous power for cabinet fans and indicators
<b>SERIAL I/O</b>	RS232-8N1; both polled and broadcast modes available
<b>TEMPERATURE SENSOR</b>	NTC thermistor probe supplied with unit
<b>RECOMMENDED CALIBRATION INTERVAL</b>	1 Year (With Pelt Cooler)
<b>POWER REQUIREMENTS</b>	12-18 VDC, 8A; 12V universal adapter supplied
<b>DIMENSIONS (W X D X H)</b>	6 x 7 x 4 in. (15 x 18 x 10 cm)
<b>WEIGHT</b>	5 lbs. (3 kg)

## ABOUT US

Sable Systems International designs and manufactures leading-edge gas, metabolic and behavioral measurement systems for calorimetry, respirometry, metabolic/behavioral phenotyping, and gas analysis. Our products enable the highest precision and resolution, optimum workflow and reliable performance – giving you utmost confidence in your results. Scientists the world over rely on Sable technology for their research needs in physiological, biomedical, environmental, and gas analysis applications.



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