

Model CL-200A Dual Channel Bipolar Temperature Controller



- Single control temperature adjustment
- Built-in protection for Peltier devices
- Open thermistor fault protection
- Quiet operation

The CL-200A Dual Temperature Controller is an automatic two channel controller capable of accurately maintaining two Peltier devices between -6° and 65°C. Power for the instrument is provided by an low noise power supply making it suitable for use in sensitive electrophysiology applications.

While the instrument has broad compatibility, it is specifically designed to control the SC-20 Dual In-line Solution Heater/Cooler in combination with any of our heated and cooled stage chambers.

The CL-200A is simple to use with a single control for temperature adjustment. While total automatic control is provided in the automatic mode, a manual control mode is also available. A loop-speed selector is available to optimize the feedback response of the system to the intrinsic thermal delay characteristics of the setup.

A feedback thermistor switch allows the user to select which thermistor is used for feedback control. Choosing T1 (control thermistor) uses the built-in thermistor attached to the peripheral device. Selecting T2 (monitor thermistor) allows control at the user selected location of the monitor thermistor (T2).

Built-in circuitry limits the maximum temperature of the Peltier to prevent thermal damage, and a freeze alert indicates when the cold side of the Peltier reaches 0°C.

CL-200A Specifications

Max. Output Voltage	±15V Heat/Cool, 0-15V Heat-Only
Max. Output Current	5.0 Amps DC each channel
Max. Output Power	75 Watts @ 3Ω load each channel
Set-Temperature Range	-6 °C to 65 °C Heat/Cool ambient to 65 °C resistive
Recorder Outputs, each channel	Control Temperature, 100mV/°C Monitor Temperature, 100mV/°C
Inputs, each channel	Monitor Thermistor, 10KΩ @25 °C External Temp Set (auto mode) External Voltage Set (manual mode)
I/O Connector, each channel	15-pin "D" connector
Panel Meter, each channel	3-digit LED display of: Set Temperature Control Temperature Monitor Temperature Output Voltage Output Current
Panel Meter Resolution	0.1 °C / 0.01 V / 0.01 A
Power Requirement	97-265 VAC / 200VA Max
Weight	4.54 kg
Dimensions (HxWxD)	8.9 x 42.6 x 29.2 cm (H x W x D)
Warranty	One year, parts & labor

Ordering Information

Cat. No.	Model	Product
64-1723	CL-200A	Dual Channel Bipolar Temperature Controller

Accessories and Replacement Parts

64-0353	SC-20	Solution Heater/Cooler Two Line
64-1659	QE-1HC	Quick Exchange Stage Incubator
64-1632	TB-3 CS	Thermal Insert for Prior NanoScanZ and chamber slides
64-1636	TB-3 CCD	Thermal Insert for Prior NanoScanZ and 35 mm Petri dishes