

TB-169

## HeatWave Labs, Inc. Model 101303 Temperature Control Centers

**HeatWave Labs Model 101303 Control Centers** are complete Temperature Controller and Power Supply units for the Standard *HeatWave Labs* UHV sample heaters and *HeatWave Labs* custom heaters and furnaces. The units will power as well as allow manual, programmable or computer control of presoak, soak and ramp rate via the front panel mounted full PID controller. These units are perfect for precise, hands off or manual control of *HeatWave Labs* devices up to 1250°C.

### Standard Features Include:

- Digital microprocessor based programmable temperature control.
- Preprogrammed for Type K thermocouple interface. User selectable from front panel.
- Type K Thermocouple input connector (compensating)
- 110 VAC, 50/60 Hz input (230 VAC factory setting optional).
- Full PID (Proportional Integral Derivative) controller programmable/manual operation.
- Digital temperature and set point readout.
- SCR phase angle controlled outputs

### Optional Features:

- Adjustable over temperature shutoff with audible alarm.
- Over temperature shutoff bypass switch
- Individual Type K thermocouple terminals on back for temperature monitoring and over temperature shutoff.
- Multiple Channels
- RS-232 interface port
- PC or Mac software.
- Rack mount or table top housing
- Prop/tote handle.
- Voltage control
- Tap selectable output voltage

### 101303-21 9/18V, 15A Single Zone Controller, Basic Unit

- 0-18V\*, 0-15A output programmable temperature control
- 120VAC +/-10V, 50/60Hz input, breaker @ 10A
- Lowest cost, simplified operation
- Type K, compensating, thermocouple input
- 2 profiles, 8 steps per profile
- \*Second tap on output transformer allows 0-9V output
- 5.25" tall x 19" wide x 12" deep rack mount, weight 17 lbs. (8 Kg.)



### 101303-01 20V/45A Single Zone Controller

- 0-20 V, 0-45 A output, programmable temperature control
- Low cost, Simple operation
- Type K thermocouple input, temperature or readout
- Fused input (10A), control (2A) and ultra fast SCR (50A).
- Dimensions: 7" tall x 19" wide x 13" deep rack mount
- Weight: 60 pounds. (28 Kg).

### 101303-03 20V/45A Controller Supply:

- 0-20 V, 0-45 A output, programmable temperature control
- Fused input (10A), control (2A) and ultra fast SCR (40A).
- Over limit: Internal, user selectable (1250°C max) high limit shut off with front panel audible alarm and bypass switch. Type K high limit thermocouple input with compensating connector.
- RS-232 connector on back panel. Please inquire for optional PC or Mac Software.
- Dimensions: 12" Wide x 8" Tall x 19.5 Deep (bench top excluding handle).
- Bench top with tote/tilt handle
- Weight: 60 pounds. (28 Kg).



Optional Package Types Available

TB-169

**HeatWave Labs, Inc. Model 101303 Temperature Control Centers****101303-02 120V/10A Single Zone Controller/Power Supply**

- 0-120V, 0-10A output programmable temperature control
- Overlimit: external, user selectable (1250°C Max.) high limit shut off with audible alarm and bypass switch
- Type K (or user selectable) TC input (control and high limit)
- RS232 interface
- Dimensions: 21" Wide x 9" Tall x 15" Deep (or optional rack mount)
- Weight: 20 pounds (9 Kg)

**101303-04 30V/45A Controller/Supply:**

- 0-30 V, 0-45 A output, programmable temperature control
- Fused input (10A), control (2A) and ultra fast SCR (40A).
- Over limit: Internal, user selectable (1250°C max) high limit shut off with front panel audible alarm and bypass switch. Type K high limit Thermocouple input with compensating connector.
- RS-232 connector on back panel. Please inquire for optional PC or Mac Software.
- Dimensions: 19" Wide x 8.75" Tall x 13" Deep rack mount
- Weight: 45 pounds. (14.3 Kg).

**101303-06 4 Zone 28V/28A Voltage Control/Power Supply**

- 0-28V, 0-28A (7A per zone) programmable voltage control
- Parallel voltage output
- Independent current monitoring with front panel selector
- Designed for cathode prefire testing
- Dimensions: 21" Wide x 9" Tall x 15" Deep

**101303-07 3-Zone Controller/Supply (Custom unit):**

- 3-Zone controller
- 0-10 V, 0-10 A output for each zone, independent zone control
- Fused input (10A), control (2A) and ultra fast SCR (40A), each zone.
- Over limit: Internal, user selectable (1250°C max) high limit shut off with front panel audible alarm and bypass switch. Type K high limit Thermocouple input with compensating connector.
- RS-232 connector on back panel. Please inquire for optional PC or Mac Software.
- Dimensions: 17" Wide x 8.75" Tall x Power = 16", Controller = 13" Deep tabletop. Controller module separate from the power supply module
- Weight: Control Box = 32 pounds (14.5 Kg), Power Box = 78 pounds (35.4 Kg).