



Benchtop Controller







FEATURES:

- Compact size
- Stackable unit
- Easy to setup and use
- Heat and Cool auto-tune
- User programmable menu
- · Illuminated power on switch
- Bluetooth® connectivity (optional)
- Profiling (up to 40 steps) (optional)
- Available with Watlow or Zesta Controllers
- Fuses, mounted in rear panel for easy access
- Auto or Manual operation LED mode indicator
- Load Status LED indicator (optional)
- Displayed in degrees °F or °C
- Front panel lockout
- · Ramp to set point
- Dual LED display
- Visual alarm

- Small & Portable
- **User Friendly**
- **Advanced Features**



The Benchtop Controller features a small footprint, and is stackable.

Zesta's Benchtop Controller is a precision microprocessorbased, single or dual zone temperature control panel. It is designed for today's demanding applications that require a compact foot print, robust design and advanced features.

Simple to program, yet loaded with powerful features, the portable Benchtop Controller is small enough to take anywhere, making it ideal for most point-of-use applications.

The profiling version of the Benchtop Controller offers up to 40 automated steps, allowing flexible user programmability. Optional communications allows users to remote-configure, monitor, and/or datalog via personal computer (PC). Optional Bluetooth® connectivity allows for easy, remote configuration through the EZ-Link™ mobile app.

Custom-made Benchtop Controllers are also available. Please ask your Zesta sales representative for details.





Benchtop Controller

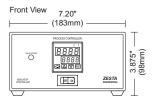
FEATURE SELECTION TABLE

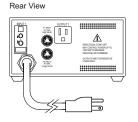
Use this table to assist in selecting the appropriate controller option under "ORDERING INFORMATION" on the next page.

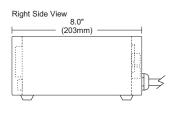
	Zesta ZEL-9100	Zesta ZEL-C62	Watlow PM Plus
Single Zone	ZEL-9100	ZEL-C62	PM Plus
Dual Zone	ZEL-9100 + ZEL-9100	ZEL-C62 + ZEL-C62	PM Plus + PM Plus
Limit Control	ZEL-9100 + ZEL-L91	ZEL-C62 + ZEL-L62 Limit	PM Plus with integrated limit
Interface	Membrane keypad	Tactile keypad	Smooth touch capacitive sensing keypad
Display	4-digit upper and lower LED	4-digit upper and lower LCD	LED / LCD display
Profiling			optional
Bluetooth			Bluetooth® compatible with EZ-LINK™ mobile app
RS-485	optional	optional	optional
Ethernet IP			optional

DIMENSIONS

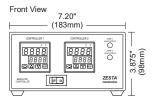
- Single Zone, or
- Single Zone w/Integrated Limit







- Dual Zone, or
- Single Zone w/Hi Limit, or
- *Dual Zone w/Integrated Limit





*Some dual zone models and/or 240V models may require a larger enclosure. Consult factory for details.





Benchtop Controller

SPECIFICATIONS

- 120V (90-125 VAC), 50/60Hz
- 240V (208-250 VAC), 50/60Hz
- 12A total or combined (15A fast acting fuse)
- 5ft power cord c/w 15A, 125VAC plug

Signal Input

Thermocouple, grounded or ungrounded.

- Accepts all standard size and miniature male
- Type J: -184 to 1832°F (-120 to 1000°C)
- Type K: -328 to 2498°F (-200 to 1370°C)
- Type T: -418 to 752°F (-250 to 400°C)

RTD, 2-wire or 3-wire

- PT100(DIN) -210°C to 700°C (-346° to 1292°F)
- PT100(JIS) -200 °C to 600 °C (-328 °F to 1112 °F)
- $0-1000\Omega$ (PM Plus only)

Thermistor (PM Plus Controller option only)

- 0-40k Ω , 0-20k Ω , 0-10k Ω , 0-5k Ω
- 2.252kΩ and 10kΩ base at 77°F (25°C)
- Linearization curves built in

Universal Process (PM Plus Controller option only)

- Process, 0-20mA @ 100Ω, or 0-10VDC @ 20kΩ input impedance; scalable, 0-50mV, 0-1000 Ω
- Process: -1999 to 9999 units

- Solid state switching, zero cross, fast cycle times
- 12.5A, 125VAC receptacle (NEMA 5-15R)
- For 240V units, several connection options are available. Consult factory for details.
- · Resistive loads only

• User programmable

Profiling (only with PM Plus Controller w/Profiling)

- · Automated process control
- Ramp/soak programming, 4 profiles, 40 total steps

Operator Interface

- On/Off button on front plate
- 1/16 DIN controller keypad interface
- EZ-LINK mobile app (Apple®, Android™) (only with PM Plus Controller w/Bluetooth®)

Communications

- RS-232
- Ethernet/IP (PM Plus Controller option only)
- Bluetooth® (PM Plus Controller option only)

Environmental

- Operating ambient temperature: 0°C to 40°C
- NEMA Type 1 Enclosure

Dimensions

• 3.875" x 7.20" x 8.00" (H x W x D) (Some dual zone models and/or 240V models may require a larger enclosure. Consult factory for details.)

Agency Approval

• CSA/UL508 NRTL/C, File No.LR91385

ORDERING INFORMATION

To order, complete the code number to the right with the information below:

1. AC Power Input:

- 1 = Single Zone 120V (90-125VAC), 50/60Hz 2 = Dual Zone - 120V (90-125VAC), 50/60Hz 3 = Single Zone - 240V (208-250VAC), 50/60Hz 4 = Dual Zone - 240V (208-250VAC), 50/60Hz
- (Some dual zone models and/or 240V models may require a larger enclosure. Consult factory for details.)

2. Controller(s):

- Single Zone

 - D = ZEL-C62 Controller
 D = ZEL-C62 Controller + ZEL-L62 Limit
 1 = ZEL-9100 Controller

 - 2 = ZEL-9100 Controller + ZEL-L91 Limit

 - 3 = PM Plus Controller (w/Bluetooth®) 4 = PM Plus Controller + Integrated Limit (w/Bluetooth®)
 - 5 = PM Plus Controller w/Profiling (w/Bluetooth®)
 - 6 = PM Plus Controller w/Profiling + Integrated Limit (w/Bluetooth®)

Dual Zone

- E = Two (2) ZEL-C62 Controllers
- 7 = Two (2) ZEL-9100 Controllers 8 = Two (2) PM Plus Controllers (w/Bluetooth®)
- 9 = Two (2) PM Plus Controllers w/Profiling (w/Bluetooth®) F = Two (2) PM Plus Controllers w/Profiling + Int. Limit (w/Bluetooth®) G = Two (2) PM Controllers w/Profiling + Int. Limits (w/Bluetooth®)

3. Input 1 (Process Temperature Sensor): 2 = 2 Wire RTD (PT100 DIN or JIS) 3 = 3 Wire RTD (PT100 DIN or JIS)

- = Type J Thermocouple
- K = Type K Thermocouple
- = Type T Thermocouple
- = Other (T/C types B, E, N, R/S, PtII, or Thermistor. Consult factory)
- = Process signal Current or Volts (Consult factory)

4. Input 2 (Process/Limit Temperature Sensor): -

- 0 = None
- 2 = 2 Wire RTD (PT100 DIN or PT100 JIS) 3 = 3 Wire RTD (PT100 DIN or PT100 JIS)
- J = Type J Thermocouple
- K = Type K Thermocouple
- T = Type T Thermocouple
- X = Other (T/C types B, E, N, R/S, PtII, or Thermistor. Consult factory)
- Z = Process signal Current or Volts (Consult factory)

5. Current indicator (Optional):

- = Single Zone, Load Status LED
- 2 = Dual Zone, Load Status LED

6. Communications / Additional Options:-

- 0 = None
- 4 = RS-232, DB9 connector (PM Plus only)
- 6 = Ethernet/IP, RJ45 connector
- X = Custom Option (consult factory)





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