



# OVENindustries

ELECTRONIC CONTROL SOLUTIONS

## 5R9-350 THERMOELECTRIC CONTROLLER

This open board temperature controller is specifically designed with a proportional integral control algorithm to provide the most precise control to thermoelectric (Peltier effect) modules at the most economical price. Controller can be setup for heat or cool and can perform Ramp & Soak profiles.

### FEATURES

- Dual outputs or output can be synchronized for higher output current
- Outputs are open drain
- Proportional Integral derivative control algorithm
- Pulse width modulated output
- TTL to USB communication via optional OI-TTL-Cable.
- Setup and Monitor control through included GUI & DLL.
- Ramp & Soak profile
- Heat or Cool operation

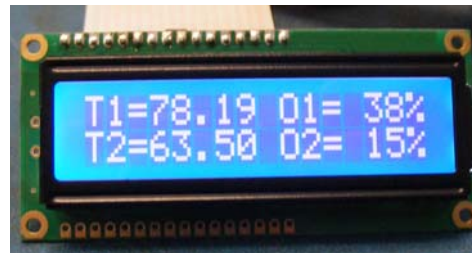
### SPECIFICATIONS

- Input Voltage: 7 to 36 VDC
- Output Voltage: 0 to 36 VDC
- Load Current: 0.1 to 15A per channel, total current 18 amps max
- Temperature Resolution: 0.01°C
- Temperature Range: -40 to 250°C
- Control Stability:  $\pm 0.1^\circ\text{C}$
- 645 W output power control
- 2.5 KHz base frequency pulse width modulated output
- Output resolution 28800 count
- Adjustable Bandwidth, Integral & Derivative settings (PID) via OI-TTL-Cable and supplied software.
- .45" H x 1.875" W x 2.25" L

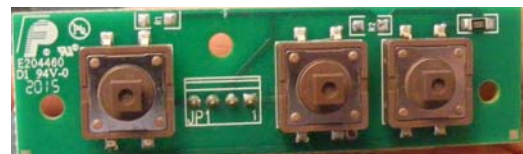
RoHS  
Compliant



**Sold Separately**



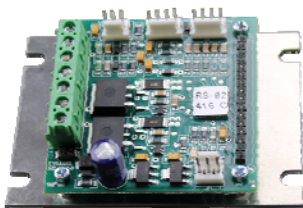
Display— 1.42"L x 3.15W" x .403"H



KEYPAD— .80"W x 2.80"L x .75"H

### ACCESSORIES

- **5R9-350-DISP** Remote LED Display.
- **5R9-350-KPAD** Remote Keypad
- **R0286** Remote Set Potentiometer
- **Sensor Family:**
  - TR67 (15K @ 25°C)  $\pm 1^\circ\text{C}$ , -20 to 100°C
  - TR136 (15K @ 25°C)  $\pm 0.1^\circ\text{C}$ , -20 to 100°C
  - TR91 (10K @ 25°C)  $\pm 1^\circ\text{C}$ , -40 to 150°C
  - TR104 (50K @ 25°C)  $\pm 1^\circ\text{C}$ , 0 to 150°C
  - TR141 (5K @ 25°C)  $\pm 1^\circ\text{C}$ , -40 to 90°C
  - TR165 (231.5K @ 25°C)  $\pm 1^\circ\text{C}$ , 25 to 250°C
- **OI-TTL-Cable** TTL to USB serial communications



OPTIONAL  
5R9-350-C mounting plate for  
easy installation .82" H X  
3.20" L X 2.25 W