



# OEM Thermoelectric Controller 150 Watt TEC Controller



# Part Number TEC-150W-OEM OEM Thermoelectric Controller

- o High Stability, High Accuracy Design
- o 10 Amp Maximum Output, up to 20 Volts
- o Maximum Output Power 150 Watts
- o Single 24 VDC Power Supply Input
- o Stand-Alone Trimpot Control, or Remote Control by Analog Input
- o Compact and Space-Efficient Design





## **TEC-150W-OEM THERMOELECTRIC CONTROLLER BOARD**

The TEC-150W-OEM is a compact OEM-format bipolar thermoelectric module controller. The controller is designed to regulate the temperature of objects using a Peltier-type thermoelectric cooler, and stabilizing the temperature at the setpoint level.

#### TWO CONTROL MODES FOR APPLICATION FLEXIBILITY

The TEC controller has two control modes: remotely using analog signals, or manually using the on-board jumpers and trimpots to allow for stand-alone operation

- Remote mode uses analog input signals for the temperature setpoint and output enable.
- Stand-Alone mode the jumpers are set so that the controller uses the on-board trim pots for the temperature setpoint, and the output is enabled when power is applied to the controller board.

The controller provides an analog voltage output 0 - 4 V representing the temperature measured by the sensor through the control range of 10°C - 40°C. Two feedback loop sensitivity levels are available, set by a jumper on the board.

### **TEC-150W-OEM SPECIFICATIONS**

#### **TEC OUTPUT SPECIFICATIONS**

Maximum Output Power: 150 Watts
 Maximum Output Current: 10 Amps

· Maximum Output Voltage: 20 Volts

Output Temperature Control Range: 10°C to 40°C

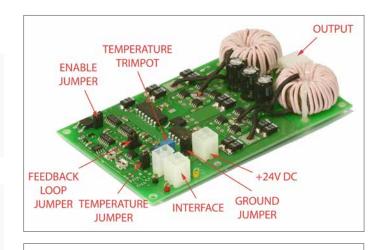
Temperature Accuracy: 0.1°C

#### **CONTROL MODE SPECIFICATIONS**

- Temperature Sensor Input: 10 kΩ NTC Thermistor
- · Stand-Alone Mode: On-Board Set Point Trimpot
- Remote Mode: Set Point 0 4 V, Scaled to Correspond to 10°C 40°C
- Monitor Output: 0 4 V, Scaled to Correspond to 10°C 40°C
- Output Enable: 5 VDC Remote Enable Signal, or On-Board Jumper
- Feedback Loop Modes: On Board Jumper to Set Two Feedback Loop Sensitivity Levels

#### **GENERAL SPECIFICATIONS**

- Power Supply Voltage: 24 VDC
- Cooling: Forced Air Cooling Required for Operation > 7 Amps
- Size: 130 mm x 80 mm x 30 mm









# **PRODUCT SALES AND SERVICE:**

Orders for this product are fulfilled by Laser Lab Source in North America and select international regions. It is manufactured by OEM Tech, Poland.

# **PRODUCT WARRANTY:**

This product is sold with a full one-year warranty. It is warrantied to be free from defects in material and/or workmanship for a period of one year from the date of shipment.



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