

TEC-336W HIGH POWER TEC CONTROLLER



High Power TEC Controller, 336W Output, Temperature Control Stability 0.01C

- Accurate, fast temperature stabilization of high power laser diodes and thermal loads
- Works with all thermistors (ie 10 k Ω), 4-wire RTD sensors (ie pt 100), K-type thermocouples
- LCD front panel display with key pad
- USB and RS232 Interface, LabVIEW Drivers, GUI Virtual Front Panel
- TEC Output Power Total: 336W
- TEC Output Current Range (bipolar): ± 7 Amps
- TEC Output Voltage Range (bipolar) : ± 48 Volts

Semiconductor Laser Sources and Control Instruments

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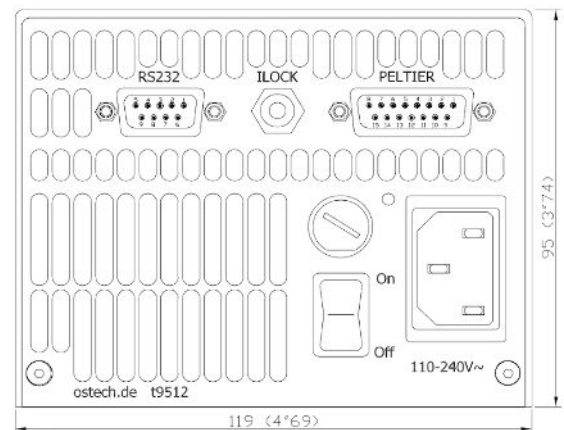
TEC-336 Laser Diode Thermoelectric Controller

The TEC-336 is a 336 Watt TEC controller optimized for fast and accurate temperature stabilization of high power laser diodes and high voltage Peltier-controlled thermal loads. It delivers high temperature stability control with high output power. The high voltage capability of the TEC-336 is useful for large or stacked Peltier devices for high-heat pumping capability. These systems come with a standard RS-232 interface and can be ordered with an optional USB interface. Lab-View drivers are available at no charge. A LabView GUI makes set-up and control of the system fast and simple. The user also has complete control through an intuitive front panel menu / LCD display with a key pad.

TEC-336 REAR PANEL CONNECTIONS



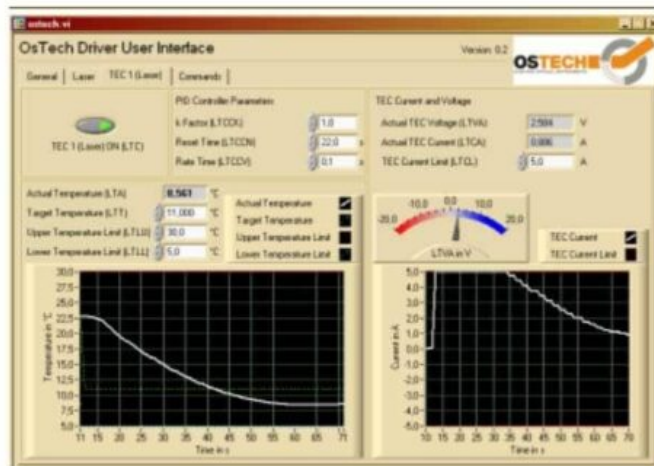
TEC-336 REAR PANEL LAYOUT



Versatile Controller Features and Built-In Laser Diode Protection

The TEC-336 TEC controller is optimized for fast and accurate temperature stabilization of high power laser diodes and Peltier controlled thermal loads. It combines high stability control with high output power. These controllers prevent over-temperature conditions which can quickly damage high power laser diodes. These TEC controllers are bipolar +/- 7 amp and 48 volt controllers designed to work with Peltier coolers mounted under or inside a laser diode. The full PID control loop settles the temperature quickly and keeps the temperature at the desired set-point to reduce the risk of over-temperature damage to your laser. Although they ship with factory-set default PID variables, the user can adjust each variable to optimize the settling time of the temperature control loop. The TEC-336 controllers feature two temperature sensor inputs, one for control of the TEC and one for control of an external fan sensor for high power fan based control applications. They support both NTC laser diode therm-istors (ie 10k Ohm) as well as I.C. sensors such as the pt100. They can also be used to control other electro-optical devices in research and development or manufacturing test applications.

**Includes LabVIEW™ virtual front panel /
graphical user interface software.
Works over USB or RS232.**



TEC-336 Laser Diode Thermoelectric Cooler Controller Specifications

TEC CONTROLLER OUTPUT

- TEC Output Power Total: 336 Watts
- TEC Output Current Range (bipolar): ± 7.00 Amps
- TEC Output Voltage Range (bipolar) : ± 48.00 Volts
- TEC Control Loop Algorithm: Full P.I.D.
- P.I.D. Variables: User Adjustable (ships with factory pre-set variables)
- Temperature Accuracy: 0.01°C
- Temperature Control Stability (1 hour @ 25°C): 0.05°C
- TEC Setpoint Resolution: 0.01°C
- Temperature Range: -25°C to 150°C
- Hardware Design Topology: H-Bridge, Bipolar Peltier Controller

RECOMMENDED ACCESSORIES

- kab-39 Unterminated Connecting Cable -or- kab-231 Terminated Connecting Cable
- acc-417 USB-RS232 Converter

TEC PROTECTION FEATURES

- Peltier Element Protection: User Set Current Limit
- User Set Upper & Lower Temperature Limits
- Rear Panel Safety Interlock

TEMPERATURE SENSOR

- Thermistors: All 2 Wire NTC Types: $10\text{ k}\Omega$, $100\text{ k}\Omega$
- IC Temperature Sensors: PT100, PT1000

USER INTERFACE AND CONNECTORS

- Front Panel: Alphanumeric LCD
- RS232 Standard: SubD-9, Female
- USB Optional: \$95.00 (Option SVC-USB)
- LabView Drivers Included
- Peltier Connector: SubD-15, Female
- Safety Interlock: Jack Connector, Stereo 3.5mm

DIMENSIONS AND POWER INPUT

- Universal 110V ~ 240 VAC Input
- Dimensions: 95 mm (H) \times 119 mm (W) \times 280 mm (L)


Product Sales and Service

Orders for this product are fulfilled by LaserDiodeControl.com, part of the Laser Lab Source group. It is manufactured for Laser Lab Source by OsTech, GmbH.

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.



Manufactured for Laser Lab Source by  OSTECHE

Technical Support and Sales in North America by:



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