



*Simply Advanced Control  
Laser Diode Drivers & Temperature Controllers*

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### **PRECISION USB LASER DIODE & TEMPERATURE CONTROL**

Leverage your low-noise, high-stability Wavelength Electronics laser control system with the budget-friendly USBKIT interface board and software package. The bus-powered USB 2.0 interface board is easily wired using on-board screw terminals and the QuickConnect™ virtual control panel provides out-of-the-box functionality with strip chart graphs that show real-time laser system status.

One laser diode driver and one temperature controller can be simultaneously operated with the USBKIT. Multiple USBKITs can be attached to the same computer, allowing for control of complex systems.

- ⤴ Factory-modified National Instruments multifunction I/O card includes D/A for remote setpoint control, and auxiliary A/Ds for increased versatility.
- ⤴ The software controls one laser diode driver, one temperature controller, and features graphing and data logging.
- ⤴ Setup configuration can be saved for repeating experiments or manufacturing testing.
- ⤴ The QuickConnect software includes on-screen wiring diagrams for the connected Wavelength modules, making set-up a snap.

Using the full-featured graphic user interface you can set the desired load temperature as a voltage or a temperature, maximum and minimum temperature limits can be established, as well as whether laser diode current is disabled if temperature limits are exceeded. Temperature sensor calibration is easy with the built-in resistance-to-temperature conversion functions.

The software provides control of the laser drive current in constant current mode, or photodiode current in constant power mode. Photodiode current is easily converted to laser output power, and the drive current limit is displayed on-screen.

Two strip charts graph data as a function of time. Raw voltages, as well as translated current and temperature values are available. One graph is associated with data from the temperature controller, and the other displays laser diode controller data. Auxiliary monitors can be associated with either graph, and all data can be logged whether it's displayed or not.

If your application requires additional functionality, program customization is available.

Wavelength Electronics has simplified advanced laser diode drive and thermal control technology for OEM and research applications since 1993. Our high performance specifications are supported by a team of experienced sales and design engineers and a state-of-the-art manufacturing facility.

To learn more about the USBKIT and Wavelength's complete line of high precision, low-noise, ultra-stable laser diode drivers and temperature controllers call 406-587-4910 or visit us at [www.teamWavelength.com](http://www.teamWavelength.com). Evaluation units are available from stock.