



Vue-HCT High Current Diode and TEC Controller



Applications:

- Materials processing
- Medical systems
- Diode-pumped solid state lasers

Benefits:

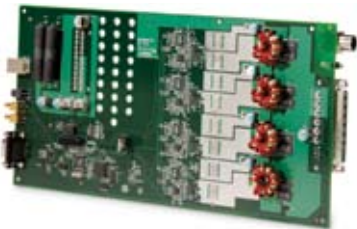
- Complete system solution
- Ease of integration
- Improve time to market
- Advanced safety monitoring and control

The **Vue-HCT** combines a high current laser diode driver with an integrated temperature servo for applications using high power fiber-coupled laser diodes. This unique driver offers all the performance of a bench top scientific controller with the size and attributes of an OEM controller. These units are available as complete systems for stand-alone operation or in PCB options for embedding into another instrument. With advanced computer control and monitoring functions and diode safety features like soft start circuitry, user settable power and current limits and temperature control, the Vue-HCT is much more than a power supply.

The unique design combines onboard intelligence and firmware with a powerful user interface software package. WinVue software transforms the OEM controller into a bench top lab controller and allows the user to do more than just control the laser diode. Software tools like data logging with one click data export, power calibration, user settable power and current limits, temperature tuning and servos, plus the ability to visualize all control settings and inputs helps design engineers shorten the product development cycle. In addition the computer control allows you to lower manufacturing cost by automating routine operations.

When it's time to incorporate the Vue-HCT driver into your application, all of the functions of the user interface software are available through a complete library of RS-232 commands. As an embedded controller the Vue-HCT is always monitoring the safety and status of the laser diode and safety interlocks. When it senses a fault condition it will safely shut down to protect your laser diode investment. Or use the Vue-HCT controller as the main system controller and take advantage of the programmable auto-start macros.

VueMetrix specializes in laser diode control systems – allowing us to design the electronics and freeing you to do what you do best, design the optical system. Our experienced team of hardware and software designers can supply you with cost effective, state of the art controllers. Talk to us about how VueMetrix controllers can give your product a significant edge.



Embedded PCB option

Features:

- Integrated diode and TEC control
- Computer control
- WinVue user interface software
- Stand-alone or embedded solutions
- Optional heatsink assembly



Optional heatsink assembly

Specifications:

Laser Diode Output	
Output Current	50 A
Output Current Resolution	0.10%
Noise/ripple	0.50%
Compliance Voltage @ Max. Current	3.0 V at output connector
Laser Voltage Measurement Range	0-7.5 V
Laser Voltage Measurement Resolution	0.03%
Laser Voltage Measurement Accuracy	2%
Monitor Inputs	
Light-loop Input Signal Range	0-5 mA
Light-loop Input Signal Resolution	0.02% FS
Light-loop Input Signal Accuracy	User calibrated using software interface
Temperature Sensor (not included)	NTC 10K Ω
Temperature Resolution	0.03 $^{\circ}$ C, typical
Temperature Accuracy	User calibrated
Peltier Controller	
Voltage Range	0 to \pm 11.5 Volts
Current Range	0-15 amp
Temperature Sensor (included)	NTC 10K Ω
General	
Input Power	90-264 VAC
Frequency	47-67 Hz
Current	<6 amp at 115 VAC
Power factor	0.95
Efficiency	60%
EMI	Designed to meet FCC-B
Operating Temperature	0 $^{\circ}$ C to 40 $^{\circ}$ C, non-condensing
Dimensions (HxWxD)	3.8"x6.3"x11.8"
Connectors	
RS232	DB-9
Output	DB37 female, mixed pin
Optional Output Cable, 1 Meter	DB37 male, one end only

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