Laser Diode Control Kits



LDKIT-80A-110W, laser diode not included

- . Maximum user flexibility with minimum complexity
- Simpler product selection and ordering process
- One source solution from a single vendor guaranteeing product performance and compatibility
- · Makes initial setup installation easy
- Makes repeat order or setup simple
- Up to 19 % discount from the individual component price

Introducing Newport's completely overhauled laser diode control kits. These kits include a laser diode driver, a temperature controller, a mount, and cables to allow a quick setup for running various types of laser diodes. You have the basic building blocks to start running the laser diode you have. The kits built for high power laser diodes as well as the popular TO-can laser and butterfly laser packages. LDKIT-XXA-YY model number structure easily identify the maximum laser current (XX) in amps and the maximum heat capacity or the laser diode type (YY). LDKIT-80A-110W, for example, consists of Newport's 80 A (model 5700-80-7) high power laser diode, 110 watt high power laser mount (model 764H-110W), 336 watt temperature controller, cables and additional accessories. LDKIT-1.5A-TO and LDKIT-1.5A-BUT are for low power TO-can and butterfly type laser packages, respectively, and they both utilize Newport's newest model 6100 Combo Laser Diode and Temperature Controller. Refer to individual product pages for specifications. Note that the wires that connect between the laser diode and the mount for current input are not supplied, due to the various package types and dimensions.

How Do I Select the Best Kit?

You will always start with the lasers or the LEDs that meet your requirements or that you fabricated. Based on the product datasheet or your calculation, estimate the operating current, forward voltage, and the amount of heat generated at operating conditions. Consider the laser diode mount that can accommodate the package mechanically and thermally. The laser diode driver should handle at least $10-20\,\%$ more than required, as the diode will draw more current to generate the same amount of light as it ages. Likewise, give some room for extra heat load for the temperature controller. We preselected the most suitable combinations of products at various current/heat load levels with our kits.

We recommend you choose the right kit for your requirements, not the one with maximum capacity, so that the temperature regulation of the laser diode is optimally controlled while minimizing the noise level of the laser diode driver.



Laser Diode Control Kits

Ordering Information

Model	Description		
LDKIT-1.5A-TO	Laser Diode Control Kit, 1.5 A, TO-can Package		
LDKIT-1.5A-BUT	Laser Diode Control Kit, 1.5 A, Butterfly Package		
LDKIT-80A-110W	Laser Diode Control Kit, 80 A, 110 W		
LDKIT-30A-61W	Laser Diode Control Kit, 30 A, 61 W		
LDKIT-6A-55W	Laser Diode Control Kit, 6 A, 55 W		

LDKIT Contents

Model	LDKIT-1.5A-TO	LDKIT-1.5A-BUT	LDKIT-80A-110W	LDKIT-30A-61W	LDKIT-6A-55W
Laser Diode Driver					
Model	6100	6100	5700-80-7	5700-30-5	560B
Output Current Range (A)	0-500 / 0-1500 mA	0-500 / 0-1500 mA	0-80	0-30	0-6
Laser Output Compliance Voltage (V)	10	10	7.5	5	5
Temperature Controller					
Model	6100	6100	3700	3700	350B
TE Current(A)	-4.00 to + 4.00	-4.00 to + 4.00	-14.00 to +14.00	-14.00 to +14.00	-5.00 to +5.00
Compliance Voltage(V)	8.0	8.0	24.0	24.0	11.0
Output Power(W)	32	32	336	336	55
Laser Diode Mount					
Model	710	744	764H-110	764H-061	764H-061
Heat Dissipation Capacity(W)	3	3	110	61	61
Cables and Accessories	1				
Cable LDD-Mount	500-04	500-04	5700-06	5700-06	500-02
Cable TEC-Mount	300-04	300-04	Included with Mount	Included with Mount	300-02
Grounding Wriststrap	FK-STRAP	FK-STRAP	FK-STRAP	FK-STRAP	FK-STRAP
Other Accessories	post, post holder, fork	post, post holder, fork	thermal paste	thermal paste	thermal paste



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