

PGL-LF1 Series Diode Lasers



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The laser module is made features of uniform power density, high straightness and good stability line beam.

The user can choose from red, green, or blue wavelengths depending on the application and material to be inspected.

PGL-LF1 Series Diode Lasers with its industrial-suited design and stable performance works perfectly as an integrated module in measurement, spectrum analysis, laser lighting show, etc.

FEATURES

- Ultra compact
- Long lifetime
- Low cost
- Easy operating

APPLICATIONS

- Measurement
- Spectrum analysis
- Laser lighting show

SYSTEM SPECIFICATIONS*

Wavelength	nm	405	450	520	635-660
Wavelength tolerance	nm (typical)	±5	±5	±5	±5
Output power	mW	1-100	1-50	1-50	1-100
Line width	<250mm	40-200um			
Line width	@1m	< 1.0mm			
Line angles		7°、10°、15°、30°、45°、50°、60°、75°、90°			
Laser operation mode		CW			
Expected lifetime	hours	10,000			

ELECTRICAL SPECIFICATIONS

Operating voltage	DC 6V	DC 6V	DC 7V	DC 3V
Connection	Cable with flying leads			

ENVIRONMENTAL CONDITIONS

Operating temperature	°C	-10°C to +45°C
Storage temperature	°C	-20°C to +80°C
Humidity	%	< 90 %, non-condensing
Dissipated heat	W	< 1 W

MECHANICAL SPECIFICATIONS

Weight	g	15g
Length	mm	52 mm
Diameter head Ø	mm	12 mm
Material		Aluminum

Dimensions of laser and PCB (mm):



KEYNOTES

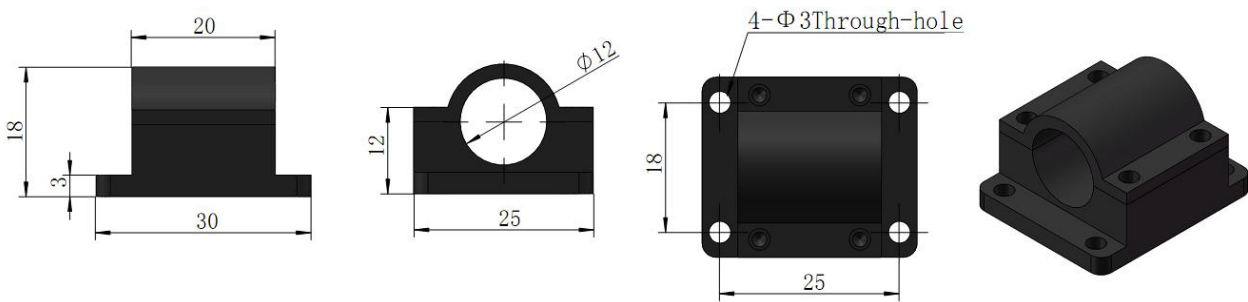
*All testing data under the conditions of temperature 25°C.

Accessories

MODULE MOUNT SPECIFICATIONS

Module mount size	mm	30 x 25 x 18mm
Applicable models size \varnothing	mm	12mm
Through-hole \varnothing	mm	3mm
Through-hole distance	mm	25 x 18mm

Dimensions of module mount (mm):



This simple mount acts as combined heat sink, electrical insulator mount for 12mm diameter diode modules. Loosen the four small set screws and remove the top half of the module mount to put the laser in. The laser is held firmly by tighten the screws. The module mount reserved 4 through-holes for user to fix the the laser on a flat and thermally dissipating surface.

CONNECTOR

USB connector	Suit for access to computer control
Bayonet nut connector	Minimize distractions
Headset connector	Easy connect and disconnect

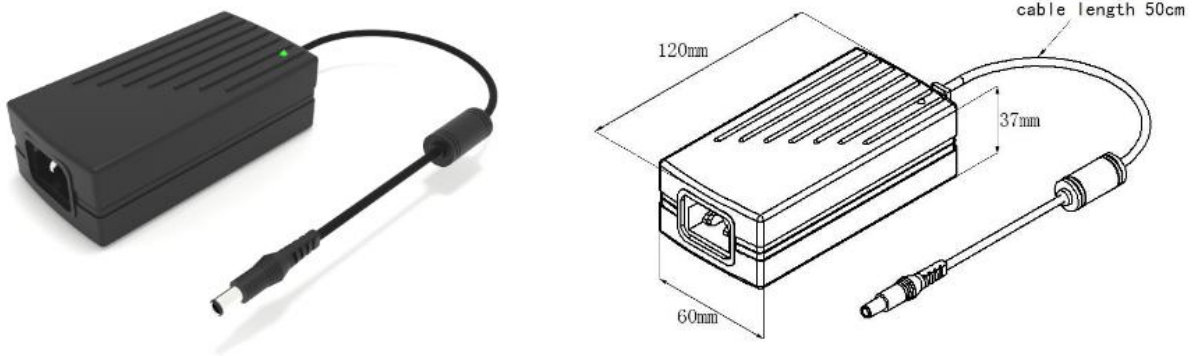
BATTERY CASE

Power supply	6-7V CR123A Lithium batteries x 2 3V AA Alkaline batteries x 2
Battery case connector	Optional, suggest using headset connector

POWER ADAPTER

Input		85-264V AC 47/63Hz
Output		DC 5V 5A
Adapter size	mm	120 x 60 x 37mm
Adapter cable length	m	0.5m
Cable connector		Easy connect/disconnect jack

Dimensions of power adapter (mm):



The Universal Diode Laser Module Power Supply with CE-marked provide a well-regulated 5 VDC. This auto ranging power module can be connected to any 85-264 VAC 47/63 Hz supply. There is an IEC 60320 input socket and a 0.5m output cable terminated with an easy connect/disconnect jack socket. The Headset connector which could also be found in accessories is compatible with the power supply jack.