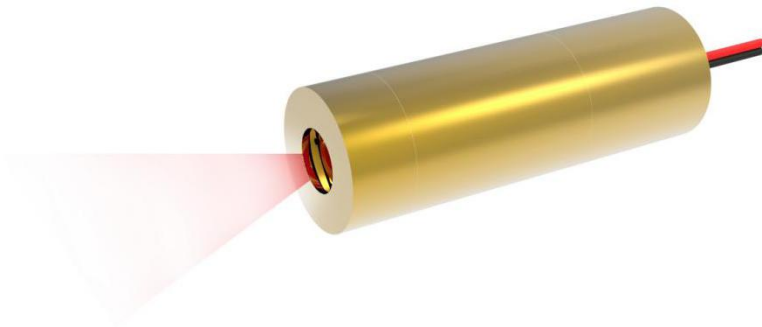


PGL-LH Series Diode Lasers



PGL-LH Series Diode Lasers

The laser module made features of high output power, ultra compact, long lifetime and easy operation etc.

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

PGL-LH Series Diode Lasers with its industrial-suited design and stable performance works perfectly as an integrated module in collimation, laser medical treatment, scientific experiment, optical instrument, etc.

FEATURES

- Output power up to 1000mW
- Long lifetime
- Easy operating

APPLICATIONS

- Collimation
- Scientific experiment
- Optical instrument

SYSTEM SPECIFICATIONS*

| | | | | | |
|----------------------|-------|--|---------|---------|----------|
| Wavelength | nm | 450 | 520 | 638 | 808 |
| Wavelength tolerance | nm | ±5 | ±5 | ±5 | ±5 |
| Output power | mW | 100-1000 | 100-500 | 100-500 | 100-1000 |
| Line width | @1m | < 1.0mm | | | |
| Line angles | | 7° 、 10° 、 15° 、 30° 、 45° 、 60° 、 75° 、 90° | | | |
| Laser operation mode | | CW | | | |
| Expected lifetime | hours | 10,000 | | | |

ELECTRICAL SPECIFICATIONS

| | | | | | |
|---------------------------|--|-------------------------|-------|-------|-------|
| Operating voltage(PCB I) | | DC 6V | DC 6V | DC 3V | DC 3V |
| Operating voltage(PCB II) | | DC 7V | DC 7V | DC 5V | DC 5V |
| Connection | | Cable with flying leads | | | |

TTL MODULATION(PCB II)

| | | | | | |
|-------------------|--|---------------|---------------|-------------|--|
| Maximum frequency | | up to 30kHz | | | |
| Signaling levels | | VIL_max<+0.9V | VIH_min>+2.2V | VIH_max<+7V | |

ANALOG MODULATION(PCB II)

| | | | | | |
|------------------------|--|---------|---------|--|--|
| Active range(optional) | | DC 0-3V | DC 0-5V | | |
|------------------------|--|---------|---------|--|--|

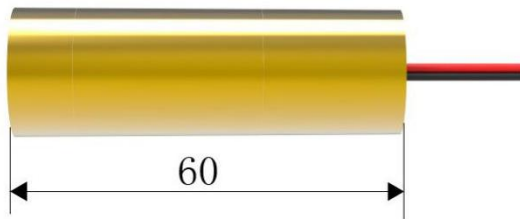
ENVIRONMENTAL CONDITIONS

| | | | | | |
|-----------------------|----|------------------------|--|--|--|
| 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 | | | |

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

MECHANICAL SPECIFICATIONS

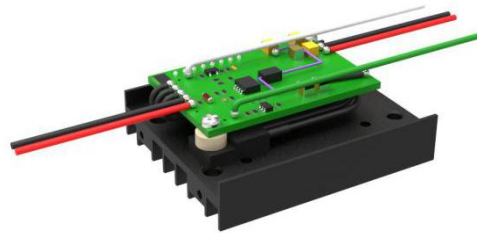
| | | |
|-----------------|----|--------|
| Weight | g | 113 g |
| Length | mm | 60 mm |
| Diameter head Ø | mm | 20 mm |
| Material | | Copper |

DIMENSIONS OF LASER MODULE (mm):**DIAGRAMMATIC DRAWING OF PCB**

PCB I



PCB II



Accessories

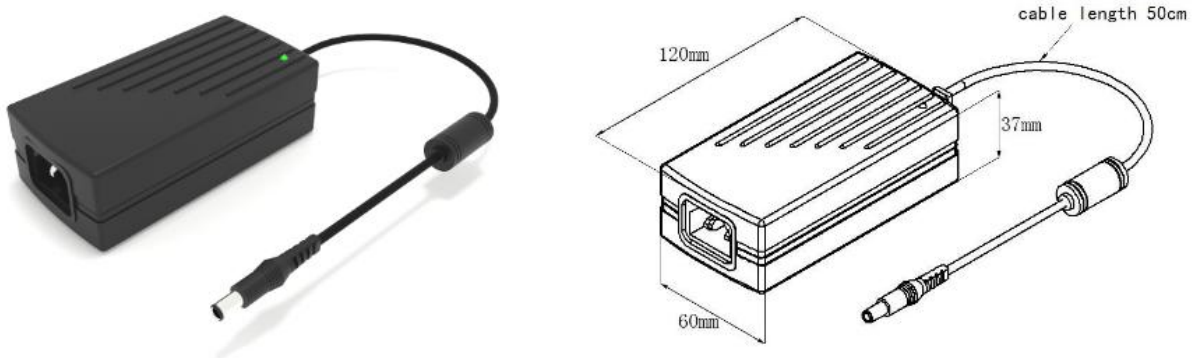
CONNECTOR

| | |
|-----------------------|-----------------------------|
| Bayonet nut connector | Minimize distractions |
| Headset connector | Easy connect and disconnect |

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 provides 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.

** EF provides other types of power adapters to meet customer demand, please contact sales for details.