



## CW532-5-831

- Green DPSS Laser Module
- 532 nm, <5 mW
- Fix Focus Acryl Lens
- Automatic Power Control
- 3 VDC Input Voltage
- IR Filter



## Description

**CW532-5-831** is a small size fix collimated diode pumped solid state (**DPSS**) Nd:YVO4+KTP laser module with a typical emission wavelength of **532 nm**, and an optical output power of **<5 mW**. It features automatic power control (**APC**) driving electronics for stable operation, an **IR filter** to block residue IR radiation, and is designed for 3 VDC supply voltage. **CW532-5-831** comes equipped with a coaxial power connector. A matching **power supply** and laser **module holder** is optionally available for quick setup and convenient operation (see page 3 for details).

## Maximum Ratings (T<sub>CASE</sub> = 25°C)

| Parameter             | Values |      | Unit |
|-----------------------|--------|------|------|
|                       | Min.   | Max. |      |
| Operating temperature | + 15   | + 30 | °C   |
| Storage temperature   | - 20   | + 80 | °C   |

## Electro-Optical Characteristics (T<sub>CASE</sub> = 25°C)

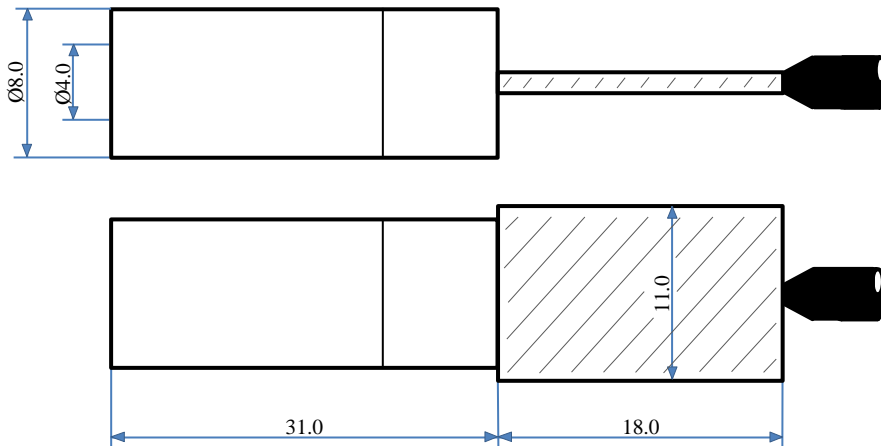
| Parameter                 | Values                           |                   |            | Unit       |
|---------------------------|----------------------------------|-------------------|------------|------------|
|                           | Min.                             | Typ.              | Max.       |            |
| Peak Wavelength           | 531                              | 532               | 533        | nm         |
| <b>Radiated Power</b>     |                                  |                   | <b>5</b>   | <b>mW</b>  |
| Beam diameter at aperture |                                  | 1.5               |            | mm         |
| Transverse mode           |                                  | TEM <sub>00</sub> |            |            |
| Warm up time              |                                  | < 3               |            | s          |
| Beam divergence           |                                  | 0.6               |            | mrad       |
| Operating Current         |                                  | 200               |            | mA         |
| <b>Supply Voltage</b>     | <b>2.2</b>                       | <b>3</b>          | <b>3.2</b> | <b>VDC</b> |
| Material body             | brass                            |                   |            |            |
| Material lens             | acryl                            |                   |            |            |
| Dimensions                | Ø 8 x 31 (49)                    |                   |            | mm         |
| Connector                 | IEC 60130-10, Type A, 5.5/2.1 mm |                   |            |            |
| MTTF                      | 3000                             |                   |            | h          |



**LASER RADIATION**  
AVOID DIRECT EYE EXPOSURE  
CLASS 3R LASER PRODUCT



## Outline Dimensions



all dimensions in mm

## Electrical Connection

(IEC 60130-10, Type A, 5.5/2.1 mm)



## Precautions

### Static Electricity:

Precautions against electrostatic discharge (ESD) must be taken when handling or operating the module. Surge voltage or electrostatic discharge can result in complete failure of the laser diode.

### Heat Sinking:

In order to maintain lifetime and stability of the laser diode it is essential to provide efficient heat management. For long time stable operation proper contact between laser module and heat sink is mandatory.

### Safety:

This laser module emits highly concentrated visible light which can be **hazardous to the human eye and skin**. It is classified as **CLASS 3R laser product** according to **IEC 60825-1** and **21 CFR Part 1040.10 Safety Standards**. Actual laser light emitted and precautions necessary strongly depend on mode of operation.



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## Accessories

### Power Supply

#### LPS31C



- 100-240 VAC universal input voltage
- AC Europlug (CEE7/16)
- IEC 60130-10 Type A connector
- Output 3 VDC, max. 1 A
- CE certified
- 30 x 80 x 75 mm
- 80 g

### Holder

#### RLM-1650



- Steel, black anodized
- Height, reach, tilt adjustable
- Fixture 360° turnable
- Max. module diameter: 16.5 mm
- 69 x 67 mm
- 152 g