



# ROITHNER LASERTECHNIK GmbH

WIEDNER HAUPTSTRASSE 76  
TEL. +43 1 586 52 43 -O. FAX. -44

1040 VIENNA  
OFFICE@ROITHNER-LASER.COM

AUSTRIA



## CW532-1-831

- Green DPSS Laser Module
- 532 nm, <1 mW
- Fix Focus Acryl Lens
- Automatic Power Control
- 3 VDC Input Voltage
- IR Filter



## Description

**CW532-1-831** 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 **<1 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. **CW532-1-831** 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

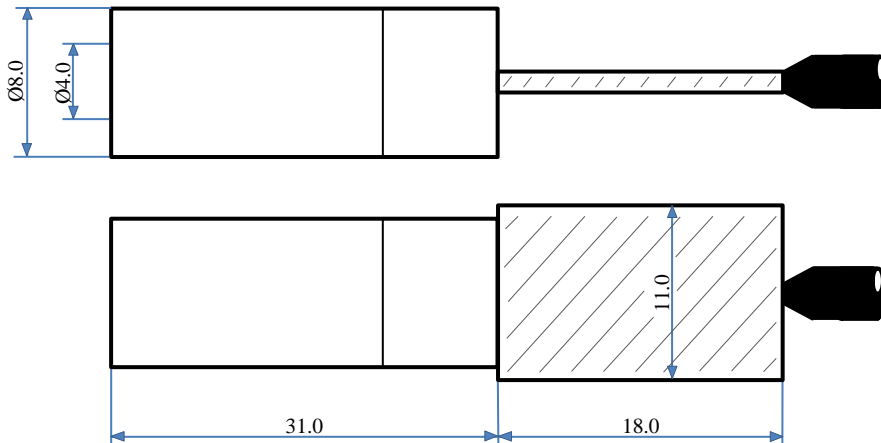
## Electro-Optical Characteristics (T<sub>CASE</sub> = 25°C)

Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength	531	532	533	nm
<b>Radiated Power</b>			<b>1</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		150		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





## Outline Dimensions



all dimensions in mm

## Electrical Connection

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



## Precautions

### Static Electricity:

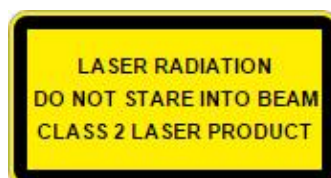
Precautions against electrostatic discharge (ESD) must be taken when handling or operating the module. Surge voltage or electrostatic discharge can result in complete failure of the laser diode.

### 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 2 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.





## 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