



## CW532-050

- Green DPSS Laser Module
- 532 nm, 50 mW
- Fix Collimated Acryl Lens
- Automatic Power Control
- 3 VDC Input Voltage
- IR Filter



### Description

**CW532-050** is a compact 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 typically **50 mW**. It features automatic power control (APC) driving electronics, an **IR filter** to block residue IR radiation, and is designed for 3 VDC supply voltage. **CW532-050** comes equipped with a coaxial power connector. A matching **power supply**, **heat sink**, and suitable **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



**NOTE**  
LASERMODULE  
MUST BE COOLED

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

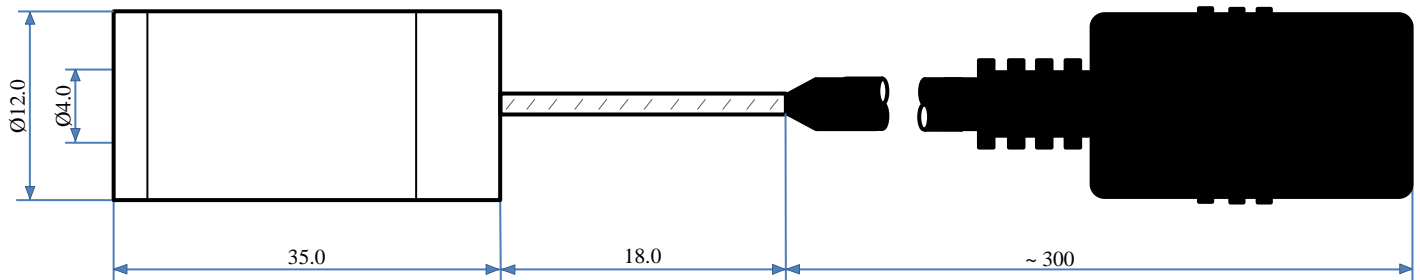
Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength	531	532	533	nm
<b>Radiated Power</b>		<b>50</b>		<b>mW</b>
Beam diameter at aperture		1.5		mm
Transverse mode	TEM <sub>00</sub>			
Warm up time		< 3		s
Beam divergence		0.8		mrad
Operating Current		600		mA
<b>Supply Voltage</b>	<b>2.2</b>	<b>3</b>	<b>3.2</b>	<b>VDC</b>
Material body	brass			
Material lens	acryl			
Dimensions	Ø 12 x 35 (53)			mm
Connector	IEC 60130-10, Type A, 5.5/2.1 mm			
MTTF	3000			h



**LASER RADIATION**  
AVOID EXPOSURE TO BEAM  
CLASS 3B 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 3B 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

### Heat Sink

#### SQ50x34



- Aluminium, black anodized
- Clamping mechanism
- 50 x 50 x 34 mm
- 114 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