



ROITHNER LASERTECHNIK GmbH

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

1040 VIENNA
OFFICE@ROITHNER-LASER.COM

AUSTRIA



CW532-050L

- Green DPSS Line Laser Module
- 532 nm, 50 mW
- 60° Fan Angle
- Automatic Power Control
- 3 VDC Input Voltage
- IR Filter



Description

CW532-050L is a compact size diode pumped solid state (**DPSS**) Nd:YVO₄+KTP laser module with a **60° line generating lens**, emitting at a wavelength of **532 nm**, and an optical output power of **50 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. **CW532-050L** 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_{CASE} = 25°C)

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



Electro-Optical Characteristics (T_{CASE} = 25°C)

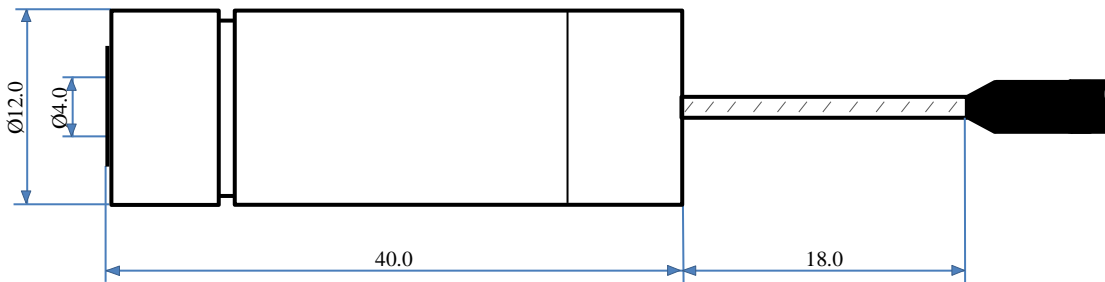
Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength	531	532	533	nm
Radiated Power		50		mW
Beam diameter at aperture		1.5		mm
Beam divergence		1.2		mrad
Fan angle*		60		°
Transverse mode	TEM ₀₀			
Warm up time		< 3		s
Operating Current		600		mA
Supply Voltage	2.2	3	3.2	VDC
Body	brass			
Collimating lens	acryl			
Line generating lens	2" cylinder lens, glass			
Dimensions	Ø 12 x 40 (58)			mm
Connector	IEC 60130-10, Type A, 5.5/2.1 mm			
MTTF	3000			h



* Fan angles of 45° and 120° are available on request



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