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CW593-01

- Yellow DPSS Laser Module
- 593.5 nm, <1 mW
- Automatic Power Control (APC)
- Fix Collimated Acryl Lens
- 2.7 – 4.2 VDC Input Voltage



Description

CW593-01 is a compact size fix collimated diode pumped solid state (**DPSS**) laser module with a typical emission wavelength of **593.5 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 2.7-4.2 VDC supply voltage range. **CW593-01** comes equipped with a coaxial power connector. Accessories like **power supply**, **heat sink**, and **laser module holder** are optionally available.

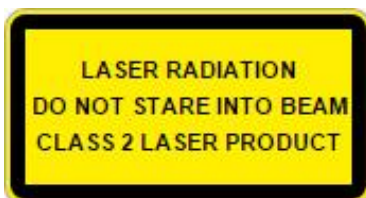
Maximum Ratings*

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

* operating close to or outside these temperatures may damage the device

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

Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength		593.5		nm
Radiated Power			1	mW
Beam diameter at aperture		1.5		mm
Transverse Mode		Near TEM ₀₀		
Beam divergence		1.0		mrاد
Current Draw		300		mA
Supply Voltage	2.7		4.2	VDC
Material body		Brass (+VDC)		
Material lens		Acryl		
Dimensions		Ø 12 x 31 (49)		mm
Connector	Type	IEC 60130-10, Type A, 5.5/2.1 mm		
	Length	~ 250		mm

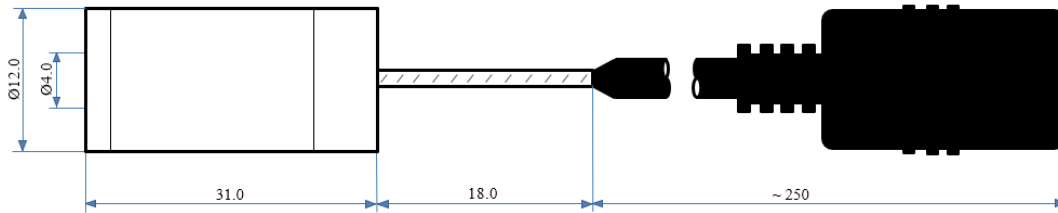


NOTE
LASERMODULE
MUST BE COOLED



Outline / Connector

Module



all dimensions in mm

Connector

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



module housing on +VDC

Optional Accessories

Heat Sink SQ50x34

- Al, black anodized
- Clamping mechanism
- 50 x 50 x 34 mm
- 114 g



NOTE
LASERMODULE
MUST BE COOLED

Power supply LPS31C

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



Holder RLM-1250

- Steel, black anodized
- Height, reach, tilt adjustable
- Fixture 360° turnable
- Max. diameter: 12.5 mm
- 69 x 67 mm
- 152 g



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 module.

Heat Sinking:

In order to maintain lifetime and stability of the laser module, efficient heat management is recommended.

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.

