

Concentricity Laser Module / Precision Laser Module

CLM-520-01 LPO / CLM-520-02 LPT



Concentricity laser modules are designed for those who need to perform precision alignment task. Beam error is less than 1 mm at the distance of 30 meters with perfect circular dot. Accessories- Battery pack, 3 meters USB to Type C cable and cable switch are all included in a plastic carry case.

FEATURES:

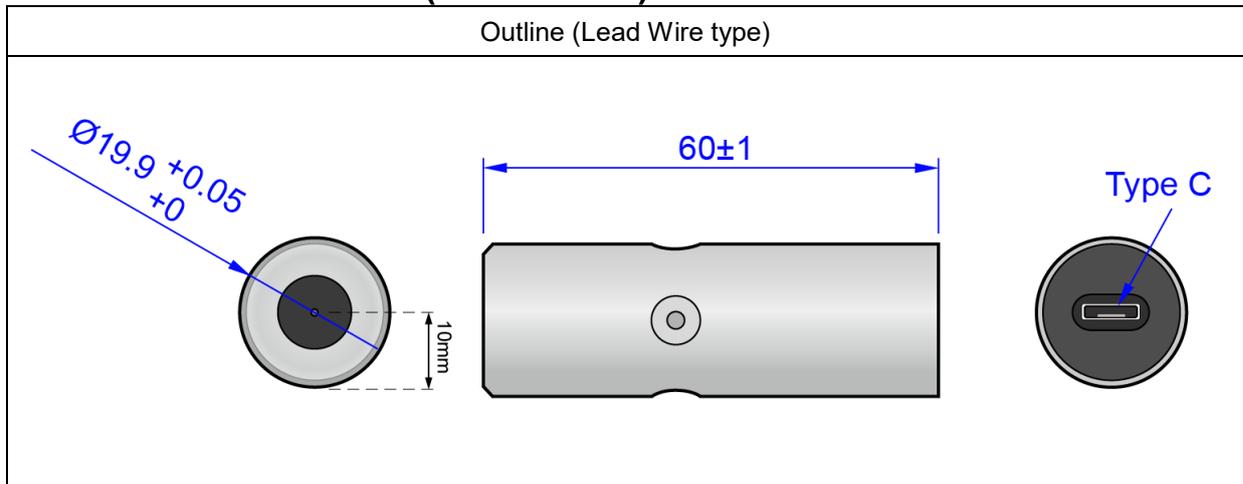
- Concentricity (beam point error): less than 1mm at 30 meters.
- Circular beam shape, aspect ratio 1:1.
- Class 1 / Class 2 eye safe laser product.
- Type C power connector.
- Battery pack, USB to Type C cable, Type C cable switch included.
- Plastic carrying case.
- Dimensions : $\text{Ø}19.9 \times 60 \text{ mm}$ ($\text{Ø}0.783" \times 2.36"$)
- Wavelength : 510~530 nm
- Output power : CLM-520-01 LPO - Class 1 - less than 0.39mW
CLM-520-02 LPT - Class 2 - less than 1mW.
- Beam Divergence (Half Angle) : 0.15 mRad
- 3~6 VDC operation.
- Connection type : Type C
- Laser dot demonstration : <https://www.youtube.com/watch?v=BlxnHH1MM3E&t>

APPLICATIONS: ideal for

- Aiming or position work.
- Concentricity test of rotating parts.
- Alignment of machine.
- Straightness test for all kinds of equipment, like carriages, crabs, etc.

CLM-520-01 LPO / CLM-520-02 LPT

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

Model No.		CLM-520-01 LPO	CLM-520-02 LPT
1	Recommended working range	0~1M	1~30M or above
2	Concentricity(Beam point error)	1mm@30M	
3	Dimensions	Ø19.9 x 60 mm (0.783" x 2.36")	
4	Weight	88±1 g	
5	Operating voltage (Vop)	3~6 VDC	
6	Operating current (Iop)	Less than 160mA	
7	Optical output power (Po)	Less than 0.39mW	Less than 1mW
8	Laser class	Class 1	Class 2
9	Wavelength at peak emission (λp)	510~530nm	
10	Collimating lens	Aspherical glass lens	
11	Output Aperture	0.8mm	3mm
12	Beam shape	Circular, aspect ratio 1:1	
13	Beam size	AS TABLE A	AS TABLE B
14	Divergence (Half Angle)	0.15 mRad	
15	Operating temp. range	-20°C ~+60°C	
16	Storage temp. range	-40°C ~+85°C	
17	Housing	Stainless steel	
18	Housing Color	Silver	
19	Potential of housing	Isolated	
20	Electrostatic discharge (ESD)	30KV / Arc protection	
21	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.	

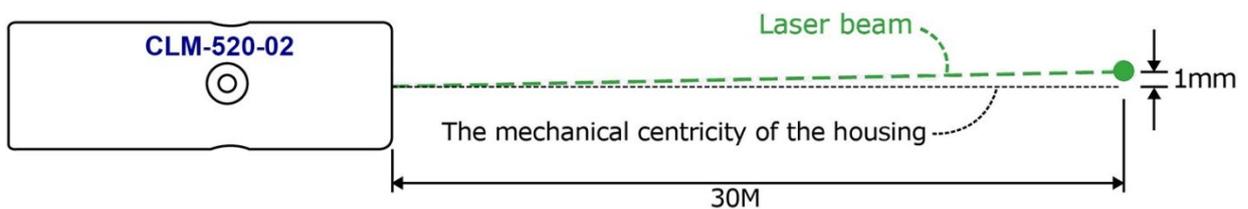
CLM-520-01 LPO / CLM-520-02 LPT

22	Protection circuit	Reversed supply circuit protection, over-current protection, surge protection, Short circuit protection	
23	Vibration resistance	10 to 55Hz, 1.5mm amplitude for 2 hours each in X, Y and Z direction	
24	Standard	IEC60825:2014	
25	Power supply connector	Type C	
26	Mean time to failure (MTTF) 25°C	10000hrs	
27	Accessories(included)	Battery pack, USB to Type C cable, Type C cable switch	
28	Package	Plastic carrying case	
29	Application	Concentricity laser	
30	Suggestion work distance	0~1 meters / 0~3 feet	1~30 meters / 3~100 feet

Please note that this is a high-accuracy instrument. Dropping it may cause a loss of accuracy and will void the warranty.

Concentricity:

The laser beam error at a distance of 30M is less than 1mm from the mechanical center of the housing.



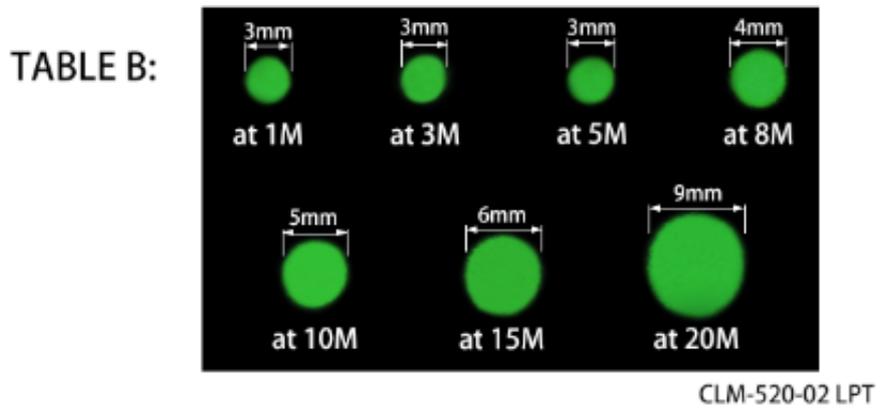
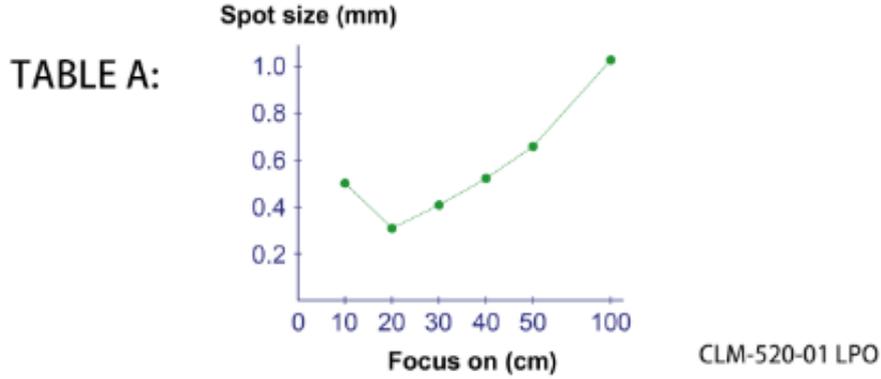
Laser Beam Position:

Laser beam center to the surface of the housing is 10mm.



Circular beam shape:

Aspect ratio 1:1



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Accessories:

CLM-BP4N3 - Battery pack (4* AA batteries)

*** AA Batteries are **NOT** included in package.

USB Output Voltage: 5V DC

Color: Black



CLM-TCSW – Type C Cable Switch

Length: 32cm

Color: Black



CLM-520-01 LPO / CLM-520-02 LPT

USB to Type C Cable
 Length: 3 meters
 Color: Black



ORDER CODE

Order Code	Wavelength	Laser Power Output	Laser Class	Connection Type
CLM-520-01 LPO	520 nm	Less than 0.39mW	Class 1	Type C
CLM-520-02 LPT	520 nm	Less than 1mW	Class 2	Type C

SAFETY LABEL

CLASS I LASER PRODUCT
 This product complies with 21CFR
 Chapter 1. subchapter J.

CLM-520-01 LPO



CLM-520-02 LPT