

Concentricity Laser Module / Precision Laser Module

CLM-635-01 LPO / CLM-635-02 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 cable and cable switch are all included in a plastic carry case.

FEATURES:

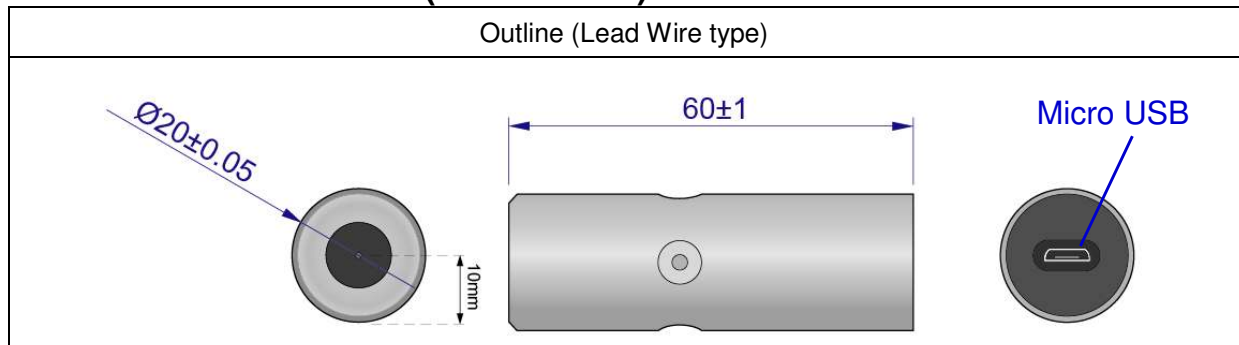
- Concentricity (beam point error): less than 1mm at 30 meters (10 second degree).
- Circular beam shape, aspect ratio 1:1.
- Class I / Class II eye safe laser product.
- Micro USB power connector.
- Battery pack, USB cable, USB cable switch included.
- Plastic carrying case.
- Dimensions : $\text{Ø}20 \times 60 \text{ mm}$ ($\text{Ø}0.787" \times 2.36"$)
- Wavelength : 630~645 nm
- Output power : CLM-635-01 LPO - Class I - less than 0.39mW
CLM-635-02 LPT - Class II - less than 1mW.
- Beam Divergence (Half Angle) : 0.15 mRad
- 3~6 VDC operation.
- Connection type : Micro USB

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-635-01 LPO / CLM-635-02 LPT

OUTLINE DIMENSIONS (UNITS: mm)



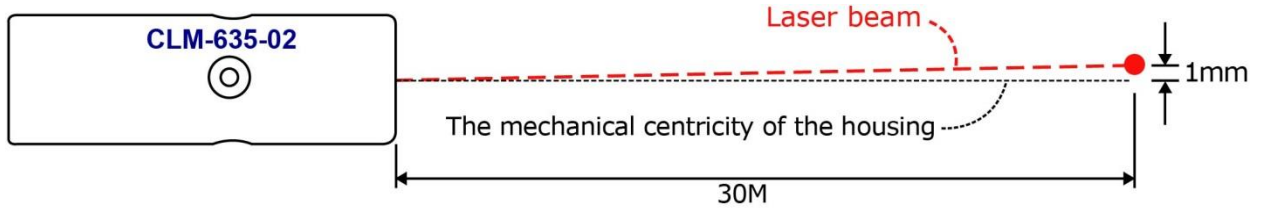
SPECIFICATIONS

| SPECIFICATIONS | | CLM-635-01 LPO | CLM-635-02 LPT |
|----------------|---|--|-------------------|
| 1 | Recommended working range | 0~1M | 1~30M or above |
| 2 | Concentricity(Beam point error) | 1mm@30M (10 second degree) | |
| 3 | Dimensions | $\varnothing 20 \times 60$ mm (0.787" x 2.36") | |
| 4 | Weight | 88±1 g | |
| 5 | Operating voltage (Vop) | 3~6 VDC | |
| 6 | Operating current (Iop) | Less than 50mA | |
| 7 | Optical output power (Po) | Less than 0.39mW | Less than 1mW |
| 8 | Laser class | Class I | Class II |
| 9 | Wavelength at peak emission (λ_p) | 630~645nm | |
| 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 | Power supply connector | Micro USB (5V) | |
| 21 | Mean time to failure (MTTF) 25°C | 10000hrs | |
| 22 | Accessories(included) | Battery pack, USB cable, USB cable switch | |
| 23 | Package | Plastic carrying case | |

* Operation temperature: it means within this temperature range, the laser spot/line will not be affected to change the spot size/line width. It can still work over this range, but the laser spot size or laser line width will be larger.

Concentricity:

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



Laser Beam Position:

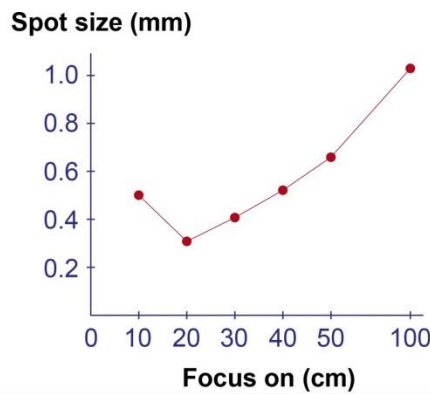
Laser beam center to the surface of the housing is 10mm.



Circular beam shape:

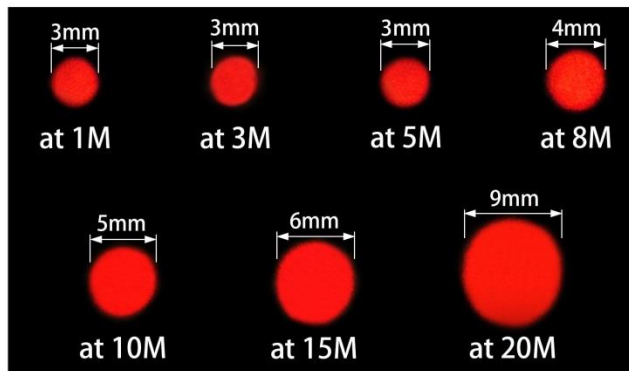
Aspect ratio 1:1

TABLE A:



CLM-635-01 LPO

TABLE B:



CLM-635-02 LPT

CLM-635-01 LPO / CLM-635-02 LPT



Accessories:

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

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

USB Output Voltage: 5V DC

Color: Black



CLM-USBSW - USB Cable Switch

Length: 28cm

Color: Black



CLM-UM3M - USB to micro USB Cable

Length: 3 meters

Color: Black



CLM-635-01 LPO / CLM-635-02 LPT

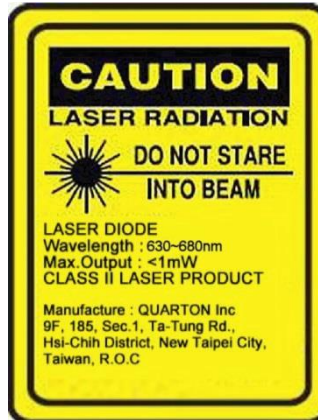
ORDER CODE

| Order Code | Wavelength | Laser Power Output | Laser Class | Connection Type |
|----------------|------------|--------------------|-------------|-----------------|
| CLM-635-01 LPO | 635 nm | Less than 0.39mW | Class I | Micro USB |
| CLM-635-02 LPT | 635 nm | Less than 1mW | Class II | Micro USB |

SAFETY LABEL



CLM-635-01 LPO



CLM-635-02 LPT