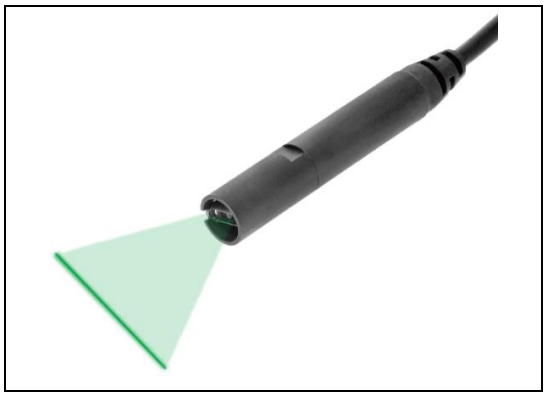
Quarton inc.

Straight Green Line Laser

VLM-520-75 series



The 75 Series Laser Line Module is specifically created for individuals requiring an exceptionally refined laser line from 1 to 10 meters or beyond. The standard VLM-520-75 LPO model is a versatile choice suitable for any distance within the specified range, maintaining a consistent laser line thickness of 2mm from 1 to 5 meters. For those with more specific requirements, the custom model VLM-520-75 LPO-X, for example: VLM-520-75 LPO-3, is precisely tailored for optimal performance at a 3-meter distance, ensuring a laser line thickness of less than 1mm around the 3-meter. Renowned for its precision, this model stands out as the epitome of fine laser line technology among our diverse product range.
Moreover, we offer customization options to focus the laser line from 1 to 4 meters, providing flexibility to meet your unique specifications and ensuring the best possible fine laser line performance tailored to your needs.

FEATURES:

- The most precise laser line module spanning distances from 1 meter to 10 meters.
- Industrial use laser modules have 10,000 hours working life.
- This module has integrated optic, direct green laser diode, and APC driver circuit.
- APC driver circuit enables the Laser output power safe and constant.
- Dimensions : Ø10 x 50 mm (Ø0.393" x1.496 ")
- Wavelength : 505~530nm.
- 3~6 VDC operation.
- Laser class: Class I Laser product.
- Fan Angle : 120°

APPLICATIONS:

- Straight Green Line from Direct Green Laser Diode.
- Wood processing. Metal processing. Stone processing.
- Textile industry. Food industry. Automotive industry.
- Medical science.

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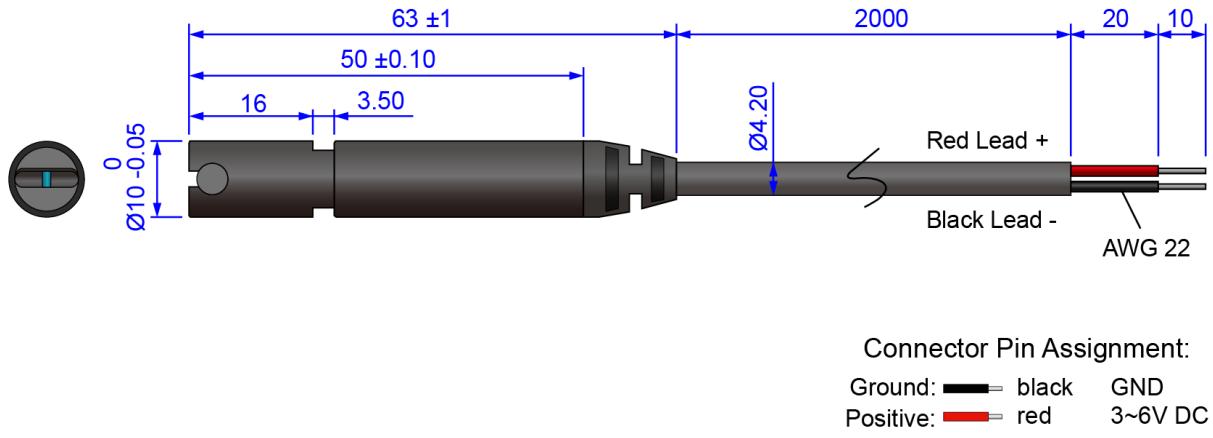
OUTLINE DIMENSIONS (UNITS: mm)

Outline (Lead Wire type)



SPECIFICATIONS

SPECIFICATIONS		**VLM-520-75 LPO**	Custom-model **VLM-520-75 LPO-X** (X= 1~4)
1	Dimensions	Ø10 x 50 mm (Ø0.393" x1.496 ")	
2	Weight	12g	
3	Operating voltage (Vop)	3~6 VDC	
4	Operating current (Iop)	< 100mA	
5	Optical power*	Less than 5mW	
6	Laser class	Class I	
7	Wavelength at peak emission (λp)	505~530nm	
8	Collimating lens	Glass lens	
9	Cylindrical lens	Quartz cylindrical lens	
10	Beam shape	Line	
11	Laser line width	2 mm @ 0~5 meters 2.1 mm @ 6 meters 2.3 mm @ 7 meters 3 mm @ 8 meters 3.5 mm @ 10 meters	< 1mm @ X meter X= 1~4**
12	Laser line accuracy	40”(±1mm@5M)	
13	Fan Angle	120°	
14	Operating temp. range***	-20°C ~+65°C	

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VLM-520-75 LPO

15	Storage temp. range	-20°C ~+85°C
16	Housing material	Aluminum
17	Potential of housing	Insulated
18	Electrostatic discharge (ESD)	30KV
19	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.
20	Protection circuit	Reversed supply circuit protection, over-current protection, surge protection, Short circuit protection
21	Vibration resistance	10 to 55Hz,1.5mm amplitude for 2 hours each in X, Y and Z direction
22	Wire type	UL-2464/22AWG
23	Cable length	D4.2,L=2000mm±30mm
24	Mean time to failure (MTTF) 25°C	10000hrs
25	Application	Wood, metal, stone processing and works that need precision fine laser line
26	Suggestion work distance	1 to 10 meters or beyond

* Optical power is total power output measured at the aperture of the laser.

** X meaning focus distance at X meters and it will generate a thinnest laser line at that distance.

Ex: VLM-520-75 LPO-2, it will generate a thinnest laser line at 2 meters distance.

*** Operation temperature 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.

ORDER CODE

Order Code	Wavelength	Laser line width	Laser Class	Connection Type
VLM-520-75 LPO	520 nm	2 mm @ 0~5 meters	Class I	Lead Wire
VLM-520-75 LPO-X (X=1~4)*	520 nm	< 1mm @ X meter (X=1~4)*	Class I	Lead Wire

* X meaning focus distance at X meters and it will generate a thinnest laser line at that distance.

Ex: VLM-520-75 LPO-2, it will generate a thinnest laser line at 2 meters distance.

SAFETY LABEL