### **Green Circular Dot Laser Module**

### VLM-520-62 Series



### **FEATURES:**

- Green circular dot laser with a precision of less than 3 mm across a range of 0 to 5 meters.
- Robust stainless steel housing. High quality green laser spot, ideal for industrial application.
- Built with high precision glass lens.
- Industrial use laser modules have 10,000 hours working life.
- Three laser power output level: LPO Class 1 laser product

LPT – Class 2 laser product

LPA - Class 3R laser product

Dimensions: Ø10 x 40 mm (Ø0.39" x 1.575")

Wavelength: 515~530 nm

3~6 VDC operation.

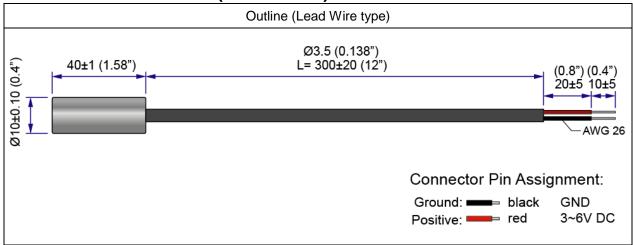
Connection type : Lead wire

### **APPLICATIONS: ideal for**

- Industrial Green Dot Laser Module for positioning, measuring, pointing and laser sighting device.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

## VLM-520-62 Series

### **OUTLINE DIMENSIONS (UNITS: mm)**



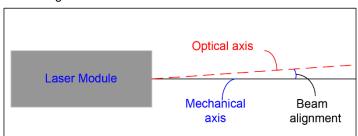
### **SPECIFICATIONS**

Part Number		VLM-520-62		
		LPO	LPT	LPA
1	Dimensions	Ø10 x 40 mm (Ø0.39" x 1.575")		
2	Weight	15±1g		
3	Operating voltage (Vop)	3~6 VDC		
4	Operating current (lop)	Less than 80mA	Less than 100mA	Less than 150mA
5	Laser power output	0.2±0.1mW	0.8±0.1mW	3.5±0.5mW
6	Laser class	Class 1	Class 2	Class 3R
7	Wavelength (λp)	515~530nm		
8	Collimating lens	Aspherical glass lens		
9	Output aperture	2mm		
10	Beam shape	Circular		
11	Spot size	Less than Ø3mm @ 0~5M		
12	Divergence (Half Angle)	Less than 0.4 mRad		
13	Beam alignment*	Less than 3°		
14	Operating temp. range**	-20°C ~+60°C		
15	Storage temp. range	-20°C ~+85°C		
16	Housing material / Color	Stainless steel / Silver		
17	Potential of housing	Insulated		
18	Electrostatic discharge (ESD)	30KV / Arc protection		
19	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.		
20	Protection circuit	Reversed supply circuit protection, over-current		
20		protection, surge protection, Short circuit protection		

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21	Vibration resistance	10 to 55Hz,1.5mm amplitude for 2 hours each in	
		X, Y and Z direction	
22	Standard	IEC60825:2014	
23	Wire type	2464 2-WIRE CABLE 26 AWG	
24	Cable length	330±30mm	
25	Mean time to failure (MTTF) 25°C	10000 hrs.	
26	International Protection Marking	IP65	
27	Application	Industrial application	
28	Suggestion work distance	0~5 meters / 0~16 feet	

\* Beam alignment:



\*\* 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 Power Output	Laser Class	Connection Type
VLM-520-62 LPA	520 nm	3.5±0.5mW	Class 3R	Lead Wire
VLM-520-62 LPT	520 nm	0.8±0.1mW	Class 2	Lead Wire
VLM-520-62 LPO	520 nm	0.2±0.1mW	Class 1	Lead Wire

### **SAFETY LABEL**

LPA:



LPT:



LPO:

**CLASS I LASER PRODUCT** 

## **Optional Accessories**

**Quarton** offers mounts, power supply boards, battery pack and USB cable switch to help you running as quickly as possible. For more information, please visit <a href="https://www.quarton.com">www.quarton.com</a>, <a href="https://

**QLM-1125** - Laser Module Mount/Holder for diameter 6mm to 12.5mm, it's an ideal choose for mounted onto optical tables.

#### Feature:

- 4 directions adjustable.
- Can be mounted onto the optical table with screws (Screws not included).
- Engraved scale for precision adjustable.



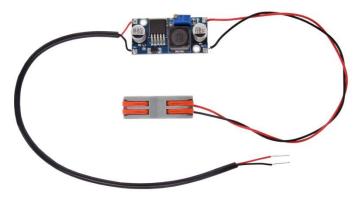
**LMPS-MP1** - Multi-function Laser Module Power Supply Board. Four input: USB, micro USB, DC Power Jack(5.5 x 2.1), and terminal block. Two channel output: 7 VDC 500mA and 5 VDC 1A. Three switches-toggle switch, remote switch and TTL signal.



#### Feature:

- Allow four kinds of power input: USB, micro USB, DC Power Jack(5.5x2.1) and terminal block.
- Two Channel output: 7 VDC 500mA and 5 VDC 1A.
- Built-in three switches: toggle switch, terminal block remote switch and TTL signal switch by on-board connect point.
- 7 VDC output work for all Quarton Laser Modules with 7-12 V operation Voltage (Vop).
- 5 VDC output work for all Quarton Laser Modules with 3-6 V operation Voltage (Vop).
- Three LED indicators: Input power indicator, 7V output indicator and 5V output indicator.

## **Optional Accessories**



LMPS-MP2 - DC converter, In: 9-36V, Out: 5V 1A.



**LMPS-mUSB1** - Laser Module Power Supply Board, Input: micro USB, Output: 5 VDC 2A.

#### Feature:

- Micro USB connector power input.
- Output 5 VDC 2A with alligator clips.
- For all Quarton Laser Modules that require 3-6V operation Voltage.



**LMPS-DC1** - Laser Module Power Supply Board, Input: DC Power Jack(5.5 x 2.1), Output: 5 VDC 2A.

#### Feature:

- DC Power Jack(5.5 x 2.1) power input.
- Output 5 VDC 2A with alligator clips.
- For all Quarton Laser Modules that require 3-6V operation voltage.

## **Optional Accessories**



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

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

#### Feature:

• USB Output Voltage: 5 VDC.

Color: Black.



**CLM-UM3M** - USB to micro USB Cable.

#### Feature:

Length: 3 meters.

Color: Black.