Green Dot Laser Module

VLM-520-60 Series



FEATURES:

- Extremely small circular laser dot within 1 meter.
- Robust stainless steel housing.
- Built with high precision glass lens.
- Customized focus within 1 meter available please direct contact us.
- Two laser power output level: LPO Class I laser product

LPT - Class II 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

- Machine vision.
- Automation industry.
- Image processing.
- Medical & Science.
- Scanning.
- Counting.
- Measurement.

VLM-520-60 Series

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

Part Number		VLM-520-60 LPO	VLM-520-60 LPT				
1	Spot Size	< 1mm, From 0 to 50cm					
I		< 2mm, From 50cm to 90cm					
2	Dimensions	Ø10 x 40 mm (Ø0.39" x 1.575")					
3	Weight	15±1g					
4	Operating voltage (Vop)	3~6 VDC					
5	Operating current (lop)	Less than 60mA	Less than 150mA				
6	Laser power output	Less than 0.39mW	Less than 1mW				
7	Laser class	Class I	Class II				
8	Wavelength (λp)	515~530nm					
9	Collimating lens / Line generating lens	Aspherical glass lens					
10	Output aperture	0.6mm					
11	Beam shape	Circular					
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	Stainless steel					

VLM-520-60 Series

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	Wire type	2464 2-WIRE CABLE 26 AWG	
21	Cable length	330±30mm	
22	Mean time to failure (MTTF) 25°C	10000 hrs	
23	International Protection Marking	IP67	
24	Application	Industrial alignment	
25	Suggestion work distance	0~0.9 meters / 0~3 feet	

* 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-520-60 LPT	520 nm	Less than 1mW	Class II	Lead Wire
VLM-520-60 LPO	520 nm	Less than 0.39mW	Class I	Lead Wire

SAFETY LABEL

LPO:

LPT:

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 <u>www.quarton.com</u>, <u>www.quarton.com/contact</u> or email <u>contact@quarton.com</u>.

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 500mA.

Feature:

- Micro USB connector power input.
- Output 5 VDC 500mA 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 500mA.

Feature:

- DC Power Jack(5.5 x 2.1) power input.
- Output 5 VDC 500mA 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-USBSW - USB Cable Switch.

Feature:

- Length: 28cm.
- Color: Black.



CLM-UM3M - USB to micro USB Cable.

Feature:

- Length: 3 meters.
- Color: Black.