# Quarton inc.

## Straight Green Line Laser

## VLM-520-37 Series



#### FEATURES:

- Direct Green Laser Diode for large temperature operation range.
- The supreme line-accuracy and the widest emitting angle line Laser module for use with Professional applications.
- Laser beam is focused at 10 meters to generate best thin laser line from 5 meters to 20 meters.
- Versatile mechanical structure on 4 sides, easy to fixed.
- This module has integrated quartz cylindrical lens, collimating lens, laser diode, and APC driver circuit.
- APC driver circuit enables the Laser power output safe and constant.
- Aluminum housing with Anodized finish for the best heat transfer consideration.
- Dimensions : (W)14 x (H)14 x (L)26 mm ((W)0.551" x (H)0.551" x (L)1.023").
- Wavelength : 505~530 nm
- Two laser power output level: LPT Class 1M laser product

LPA - Class 2M laser product

- Emitting angle: > 120°
- 7~10 VDC operation.
- Connection type: Lead wire.

### **APPLICATIONS:**

- Professional Green Straight Line Laser Module, ultra-precision grade for professional leveling, alignment, adjusting, positioning.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

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### VLM-520-37 Series

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



#### **SPECIFICATIONS**

SPECIFICATIONS		VLM-520-37		
		LPT	LPA	
1	Dimensions	(W)14 x (H)14 x (L)26 mm		
I		((W)0.551" x (H)0.551" x (L)1.023")		
2	Weight	11g		
3	Operating voltage (Vop)	7~10 VDC		
4	Operating current (lop)	Less than 80mA	Less than 120mA	
5	Optical power*	4~5mW	9~10mW	
6	Laser power output**	Less than 0.39mW	Less than 1mW	
7	Laser class	Class 1M	Class 2M	
8	Wavelength at peak emission (λp)	505~530nm		
9	Collimating lens	Glass lens		
10	Line lens	Glass lens		
11	Beam shape	Line		
12	Laser line Width	2±1mm@5m, 4±1mm@10m		
13	Laser line accuracy	20" (± 1mm @10m)		
14	Emitting angle	More than 120°		
15	Operating temp. range***	-20°C ~ +50°C		
16	Storage temp. range	-40°C ~ +70°C		

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### VLM-520-37 Series

17	Housing	Aluminum	
18	Housing color	Black	
19	Potential of housing	Insulated	
20	Electrostatic discharge (ESD)	30KV	
21	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.	
22	Wire type	1007-26AWG	
23	Cable length	115±15mm	
24	Mean time to failure (MTTF) 25°C	10000hrs	
25	Application	Precision industrial alignment	
26	Suggestion work distance	1~20 meters / 3~60 feet	

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

\*\* According to FDA 1040.10 & IEC 60825-1 regulations, laser power output is measured by 7mm aperture stop from a 10 cm distance of the laser.

\*\*\* 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	Optical power*	Laser power	Laser Class	Connection
			output**		Туре
VLM-520-37 LPT	520 nm	4~5mW	Less than	Class 1M	Lead Wire
			0.39mW		
VLM-520-37 LPA	520 nm	9~10mW	Less than	Class 2M	Lead Wire
			0.9mW		

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

\*\* According to FDA 1040.10 & IEC 60825-1 regulations, laser power output is measured by 7mm aperture stop from a 10 cm distance of the laser.

### SAFETY LABEL

**CLASS I LASER PRODUCT** 



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