# Quarton inc.

# **Straight Green Line Laser**

## VLM-520-55 Series



#### **FEATURES:**

- Direct Green Laser Diode for large temperature operation range.
- High quality straight green line laser, ideal for industrial application.
- Laser beam is focused at 10 meters to generate best thin laser line from 5 meters to 20 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 38 mm (Ø0.393" x 1.496")
- Wavelength: 510~530 nm
- Laser power output: LPT Class 2M Laser product.

LPO - Class 1M Laser product.

- Fan Angle : >90°3~6 VDC operation.
- Connection type : Lead wire

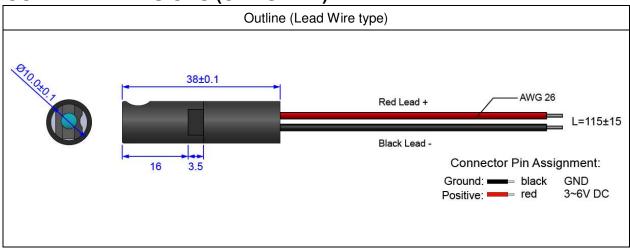
### **APPLICATIONS:**

- 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)**



## **SPECIFICATIONS**

	CDECIFICATIONS	VLM-520-55		
SPECIFICATIONS		LPO	LPT	
1	Dimensions	Ø10 x 38 mm (Ø0.393" x 1.496")		
2	Weight	5.2g		
3	Operating voltage (Vop)	3~6 VDC		
4	Operating current (lop)	Less than 200mA		
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)	510~530nm		
9	Collimating lens	Glass lens		
10	Line lens	Glass lens		
11	Beam shape	Line		
12	Laser line width	3±0.5mm@5M, 6±0.5mm@10M		
13	Laser line accuracy	40"(±1mm@5M)		
14	Fan Angle	More than 90°		
15	Operating temp. range***	-20°C ~+65°C		
16	Storage temp. range	-20°C ~+85°C		
17	Housing material	Aluminum		
18	Potential of housing	Insulated		
19	Electrostatic discharge (ESD)	30KV		



## VLM-520-55 Series

20	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.	
21	Wire type	1007-26AWG	
22	Cable length	115±15mm	
23	Mean time to failure (MTTF) 25°C	10000hrs	
24	Application	Precision industrial alignment	
25	Suggestion work distance	1~20 meters / 3~60 feet	

<sup>\*</sup> Optical power is total power output measured at the aperture of the laser.

### **ORDER CODE**

Order Code	Wavelength	Optical power*	Laser power	Laser Class	Connection
			output**		Туре
VLM-520-55 LPO	520 nm	4~5mW	Less than	Class 1M	Lead Wire
			0.39mW		
VLM-520-55 LPT	520 nm	9~10mW	Less than	Class 2M	Lead Wire
			0.9mW		

<sup>\*</sup> Optical power is total power output measured at the aperture of the laser.

### SAFETY LABEL

**CLASS I LASER PRODUCT** 



<sup>\*\*</sup> 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.

<sup>\*\*\*</sup> 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.

<sup>\*\*</sup> 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.