# Quarton inc.

# **Straight Red Line Laser**

## VLM-635-55 Series



### **FEATURES:**

- Red Laser Diode for large temperature operation range.
- High quality straight red 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, red laser diode, and APC driver circuit.
- APC driver circuit enables the Laser power output safe and constant.
- Dimensions: Ø10 x 38 mm (Ø0.393" x 1.496")
- Wavelength: 630~645 nm
- Laser power output: LPT Class 2M Laser product.

LPO - Class 1M Laser product.

Fan Angle : 60°3~6 VDC operation.

Connection type : Lead wire

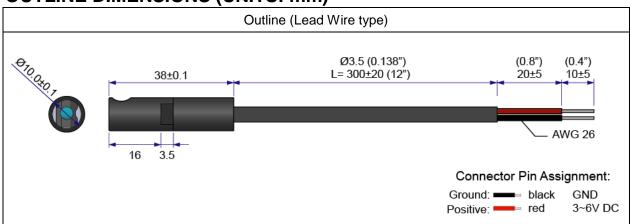
#### **APPLICATIONS:**

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

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## VLM-635-55 Series

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



## **SPECIFICATIONS**

SPECIFICATIONS		VLM-635-55			
		LPO	LPT		
1	Dimensions	Ø10 x 38 mm (Ø	Ø10 x 38 mm (Ø0.393" x 1.496")		
2	Weight	6g			
3	Operating voltage (Vop)	3~6 VDC			
4	Operating current (lop)	Less than 80mA	Less than 100mA		
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)	630~645nm			
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	60°			
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			
20	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.			



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21	Wire type	2464 2-WIRE CABLE 26 AWG	
22	Cable length	330±30mm	
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-635-55 LPO	635 nm	4~5mW	Less than	Class 1M	Lead Wire
			0.39mW		
VLM-635-55 LPT	635 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 a 7mm aperture stop from a 10cm 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.