

Industrial Use Line Laser

VLM-635/650-27 Series



FEATURES:

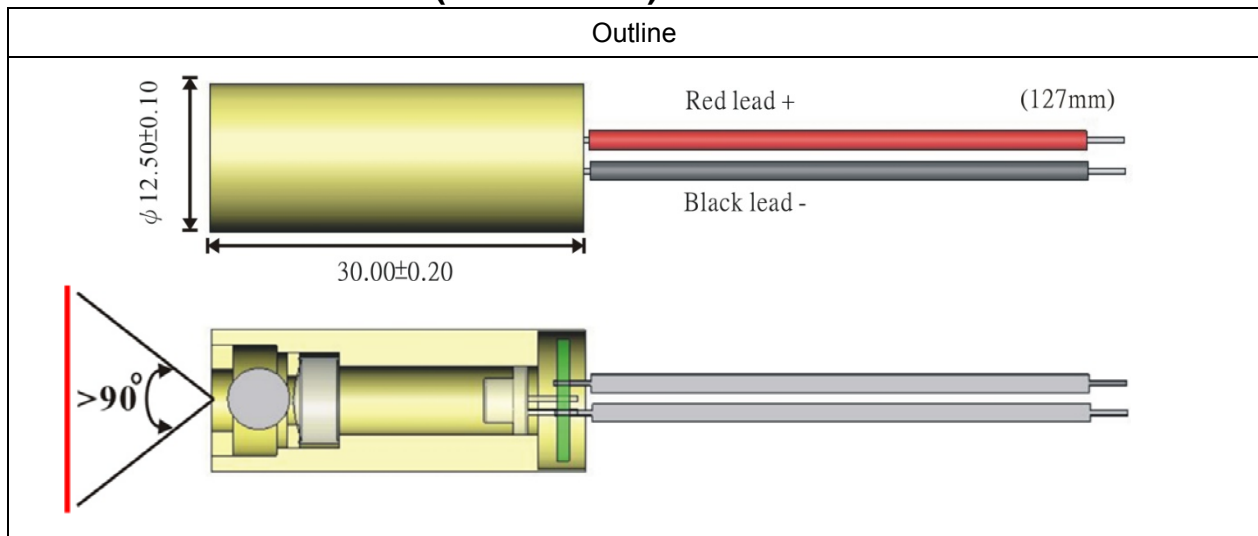
- Industrial Red Line Laser.
- The best line-accuracy and the widest emitting angle line Laser module for use with high-precision devices.
- This module has integrated quartz cylindrical lens, collimating lens, laser diode, and APC driver circuit.
- APC driver circuit enables the Laser output power safe and constant.
- Includes patented solid brass structure for the best shock resistance and better heat transfer consideration.
- Aspherical Plastic Lens and Quartz Cylindrical Lens provides Line Laser.
- Dimensions: $\Phi 12.5 \times 30$ mm ($\Phi 0.492" \times 1.181"$)
- Wavelength : 635 / 650 nm
- Output power (Center/Total) : Class II – less than 1mW / 2~12mW
- Laser line accuracy: 40" (+/- 1mm @5m).
- Emitting angle: $> 90^\circ$
- 2.6~5 VDC operation.
- Connection type: Lead wire

APPLICATIONS:

- High accuracy Red Straight Line Laser, for Industrial high-precision leveling, alignment, adjusting, positioning, measuring and targeting device.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science

VLM-635/650-27 Series

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

SPECIFICATIONS		635-27 LPT	635-27 LPT-10	650-27 LPT	650-27 LPT-30
1	Dimensions	Φ12.5 x 30 mm (Φ0.492" x 1.181")			
2	Operating voltage (Vop)	2.6~5 VDC			
3	Operating current (Iop)	< 50mA	< 55mA	< 35mA	<100mA
4	Continuous wave output power (Center)	<1mW			
5	Continuous wave output power (Total)	2mW	4mW	2mW	12mW
6	Wavelength at peak emission (λp)	630~645nm		645~665nm	
7	Cylindrical lens	Quartz cylindrical lens (ø5)			
8	Collimating lens	Aspherical plastic lens(ø7)			
9	Laser line Width	3 ±0.5mm @5m, 6 ±0.5mm @10m			
10	Laser line accuracy	40" (+/- 1mm @5m)			
11	Emitting angle	> 90°			
12	Operating temp. range	+10°C ~+40°C			
13	Storage temp. range	-20°C ~+65°C			
14	Housing	Brass			
15	Mean time to failure (MTTF) 25°C	5000hrs		10000hrs	

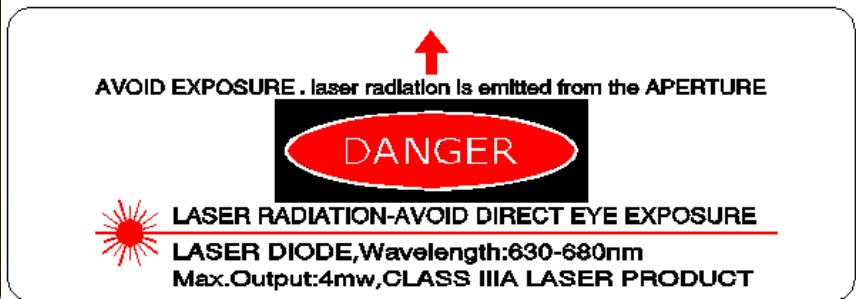
Note : Laser module housing is an electrical positive surface, it is imperative that contact between the laser module and the machine be avoided. This is to prevent damage from the machine electrical leakage. Surge protected power supply to the laser module is strongly recommended.

VLM-635/650-27 Series

ORDER CODE

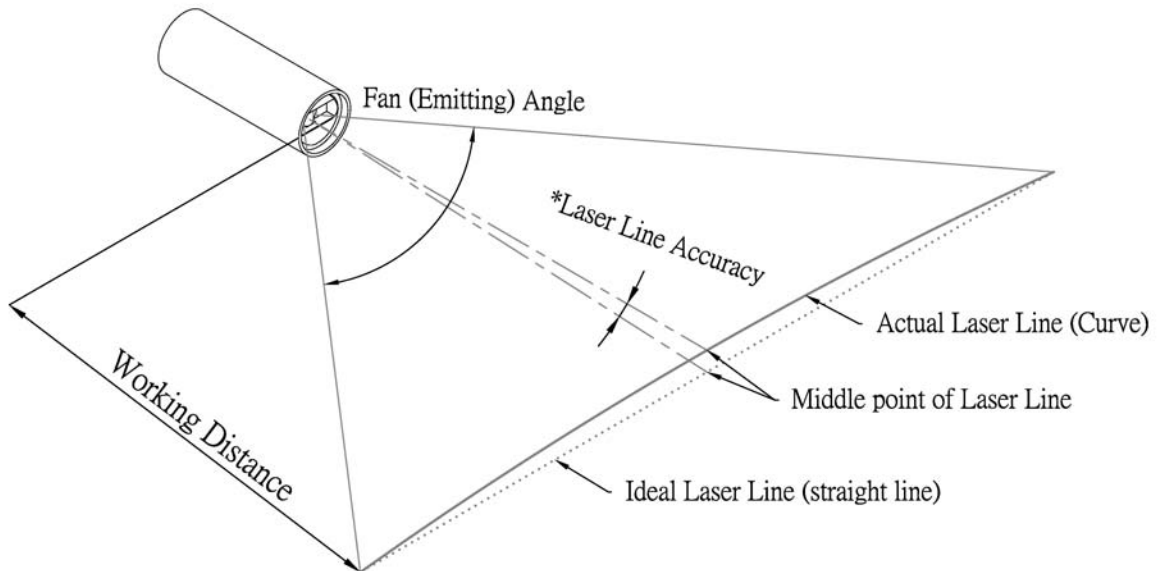
Order Code	Wavelength	Total Output Power	Connection Type
VLM-635-27 LPT	635 nm	2 mW	Lead Wire
VLM-635-27 LPT-10	635 nm	4 mW	Lead Wire
VLM-650-27 LPT	650 nm	2 mW	Lead Wire
VLM-650-27 LPT-30	650 nm	12 mW	Lead Wire

SAFETY LABEL



Annex A.

Laser Line Accuracy



*Laser Line Accuracy

The error angle between Ideal and Actual Laser Line at middle point.

For VLM-635/650-27 Series, Laser line accuracy < 40" (Arc Second) = $\frac{40}{3600}$ ° (Degree)

For VLM-635/650-37 Series, Laser line accuracy < 20" (Arc Second) = $\frac{20}{3600}$ ° (Degree)

For VLM-532-46 Series, Laser line accuracy < 20" (Arc Second) = $\frac{20}{3600}$ ° (Degree)