

Professional Use Line Laser

VLM-635/650-37 LPT



FEATURES:

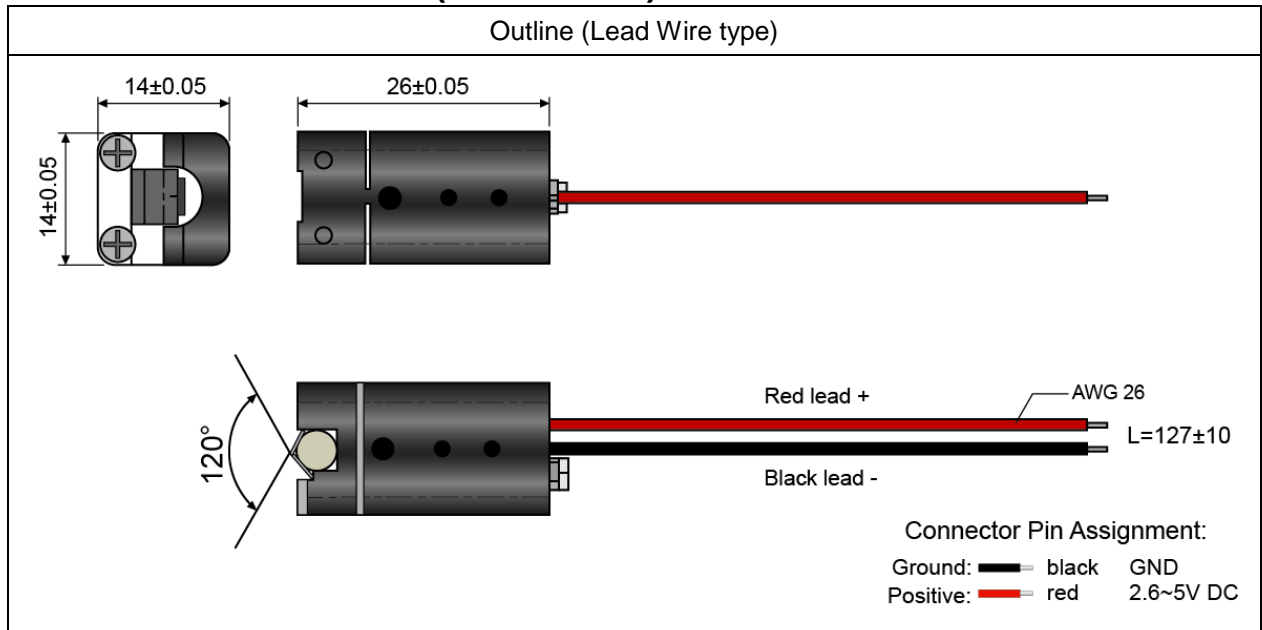
- Professional Red Line Laser.
- The supreme line-accuracy and the widest emitting angle line Laser module for use with Professional applications.
- Versatile mechanical structure on 4 sides, easy to fixed.
- This module has integrated quartz cylindrical lens, collimating lens, laser diode, and APC driver circuit.
- APC driver circuit enables the Laser power output safe and constant.
- Aluminum housing with Anodized finish for the best heat transfer consideration.
- Utilize Glass Lens, spot-size maintain tight-dot while temperature fluctuate between -20°C ~50°C.
- Dimensions : (W)14 x (H)14 x (L)26 mm ((W)0.551" x (H)0.551" x (L)1.023").
- Wavelength : 630 / 650 nm
- Two laser power output level: Class 1M / Class 2M
- Laser line accuracy: 20" (+/- 1mm @10m)
- Emitting angle: > 120°
- 2.6~5 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.

VLM-635-37 LPT

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

SPECIFICATIONS		VLM-635-37 LPT
1	Dimensions	(W)14 x (H)14 x (L)26 mm ((W)0.551" x (H)0.551" x (L)1.023")
2	Weight	11g
3	Operating voltage (Vop)	2.6~5 VDC
4	Operating current (Iop)	Less than 50mA
5	Optical power*	4~5mW
6	Laser power output**	Less than 0.39mW
7	Laser class	Class 1M
8	Wavelength at peak emission (λ_p)	630~645nm
9	Cylindrical lens	Quartz cylindrical lens
10	Collimating lens	Glass lens
11	Beam shape	Line
12	Laser line Width	2 ± 1 mm@5m, 4 ± 1 mm@10m
13	Laser line accuracy	20" (± 1 mm @10m)
14	Emitting angle	More than 120°
15	Operating temp. range***	$-20^\circ\text{C} \sim +50^\circ\text{C}$
16	Storage temp. range	$-40^\circ\text{C} \sim +70^\circ\text{C}$

VLM-635-37 LPT

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	127±10mm
24	Mean time to failure (MTTF) 25°C	5000hrs

* 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 output**	Laser Class	Connection Type
VLM-635-37 LPT	635 nm	4~5mW	Less than 0.39mW	Class 1M	Lead Wire

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

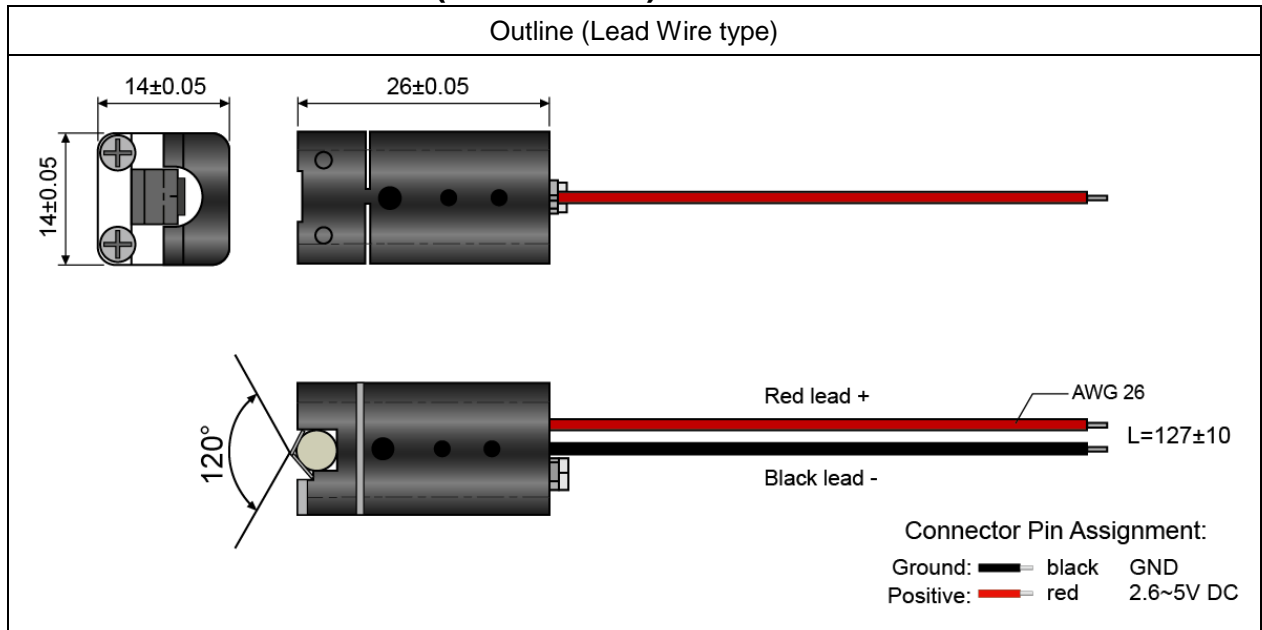
** According to FDA 1040.10 & IEC 60825-1 regulations, laser power output is measured by 7mm aperture stop from a 10 cm distance of the laser.

SAFETY LABEL

CLASS I LASER PRODUCT

VLM-650-37 Series

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

SPECIFICATIONS		VLM-650-37	
		LPT	LPT-30
1	Dimensions	(W)14 x (H)14 x (L)26 mm ((W)0.551" x (H)0.551" x (L)1.023")	
2	Weight	11g	
3	Operating voltage (Vop)	2.6~5 VDC	
4	Operating current (Iop)	Less than 35mA	Less than 100mA
5	Optical power*	4~5mW	12~15mW
6	Laser power output**	Less than 0.39mW	Less than 0.9mW
7	Laser class	Class 1M	Class 2M
8	Wavelength at peak emission (λ_p)	645~665nm	
9	Cylindrical lens	Quartz cylindrical lens	
10	Collimating lens	Glass lens	
11	Beam shape	Line	
12	Laser line Width	2 ± 1 mm@5m, 4 ± 1 mm@10m	
13	Laser line accuracy	20" (± 1 mm @10m)	
14	Emitting angle	More than 120°	
15	Operating temp. range***	$-20^\circ\text{C} \sim +50^\circ\text{C}$	
16	Storage temp. range	$-40^\circ\text{C} \sim +70^\circ\text{C}$	

VLM-650-37 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	127±10mm
24	Mean time to failure (MTTF) 25°C	10000hrs

* 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 output**	Laser Class	Connection Type
VLM-650-37 LPT	650 nm	4~5mW	Less than 0.39mW	Class 1M	Lead Wire
VLM-650-37 LPT-30	650 nm	12~15mW	Less than 0.9mW	Class 2M	Lead Wire

* 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

