

## **Ultra-Far Range Laser**

# VLM-635/650-18 Series



### FEATURES:

- Ultra-Far Range Dot Laser.
- Diffraction Limited Lens to achieve a near-collimated Laser system, which can be sighted Ultra-Far distance range.
- This module has integrated optic, 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.
- Glass-base hybrid lens provides Ultra-Far range Dot Laser.
- Dimensions: Ø13 x 43.5 mm (Ø0.512" x 1.713")
- Wavelength : 635 nm / 650 nm
- Laser power output : 2.5mW, Class IIIa.
- Beam Divergence: 0.2 mRad.
- 2.6~6 VDC operation.
- Connection type: Lead wire.

### **APPLICATIONS:**

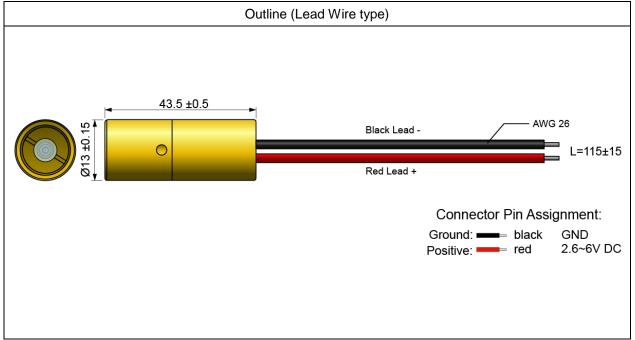
- Red Dot Laser-glass aspherical lens with long back focus length function to generate smallest spot at long distances. Ideal use for long distance position, targeting, professional laser sight and security monitor.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

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## VLM-635-18 LPA

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



#### **SPECIFICATIONS**

SPECIFICATIONS	VLM-635-18 LPA	VLM-650-18 LPA					
Dimensions	Ø13 x 43.5 mm (Ø0.512" x 1.713")						
Operating voltage (Vop)	2.6~6 VDC						
Operating current (lop)	Less than 50mA						
Laser power output	2.5±1mW						
Laser class	Class Illa						
Wavelength at peak emission (λp)	630~645nm	645~665nm					
Collimating lens	Glass lens						
Output aperture	6mm						
Beam shape	Circular						
Spot size at 40M	Less than 16mm						
Divergence (Half Angle)	0.2 mRad						
Beam alignment	Less than 3°						
Operating temp. range*	-20°C ~+50°C						
Storage temp. range	-40°C ~+70°C						
Housing	Brass						
Potential housing**	VDD(+)						
Electrostatic discharge (ESD)	30KV						
	SPECIFICATIONS Dimensions Operating voltage (Vop) Operating current (lop) Laser power output Laser class Wavelength at peak emission (λp) Collimating lens Output aperture Beam shape Spot size at 40M Divergence (Half Angle) Beam alignment Operating temp. range* Storage temp. range Housing Potential housing** Electrostatic discharge (ESD)	DimensionsØ13 x 43.5 mm (f)Operating voltage (Vop)2.6~6Operating current (Iop)Less thatLaser power output2.5±Laser classClassWavelength at peak emission (λp)630~645nmCollimating lensGlassOutput aperture6nBeam shapeCirroSpot size at 40MLess thatDivergence (Half Angle)0.2 mBeam alignmentLess thatOperating temp. range*-20°C -Storage temp. range-40°C -HousingBraPotential housing**VDI					

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## VLM-635-18 LPA

18	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.		
19	Wire type	1007-26AWG		
20	Cable length	115±15mm		
21	Mean time to failure (MTTF) 25°C	5000hrs	10000hrs	
22	Application	Long range application		
23	Suggestion work distance	10~200 meters / 30~600 feet		

\* Operation temperature: it 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.

\*\* 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.strongly recommended.

#### **ORDER CODE**

Order Code	Wavelength	Laser Power Output	Laser Class	Connection Type
VLM-635-18 LPA	635 nm	2.5mW	Class IIIa	Lead Wire
VLM-650-18 LPA	650 nm	2.5mW	Class Illa	Lead Wire

### SAFETY LABEL



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