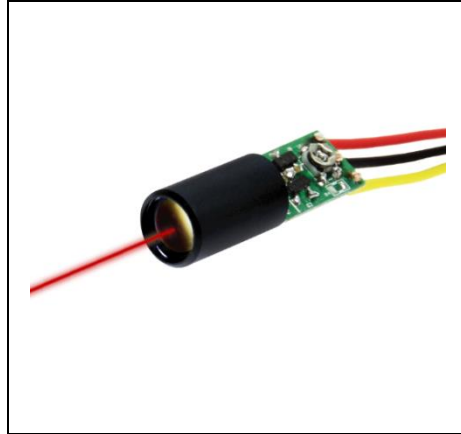


## TTL Modulation Red Dot Laser Module

### VLM-635-31 Series



#### FEATURES:

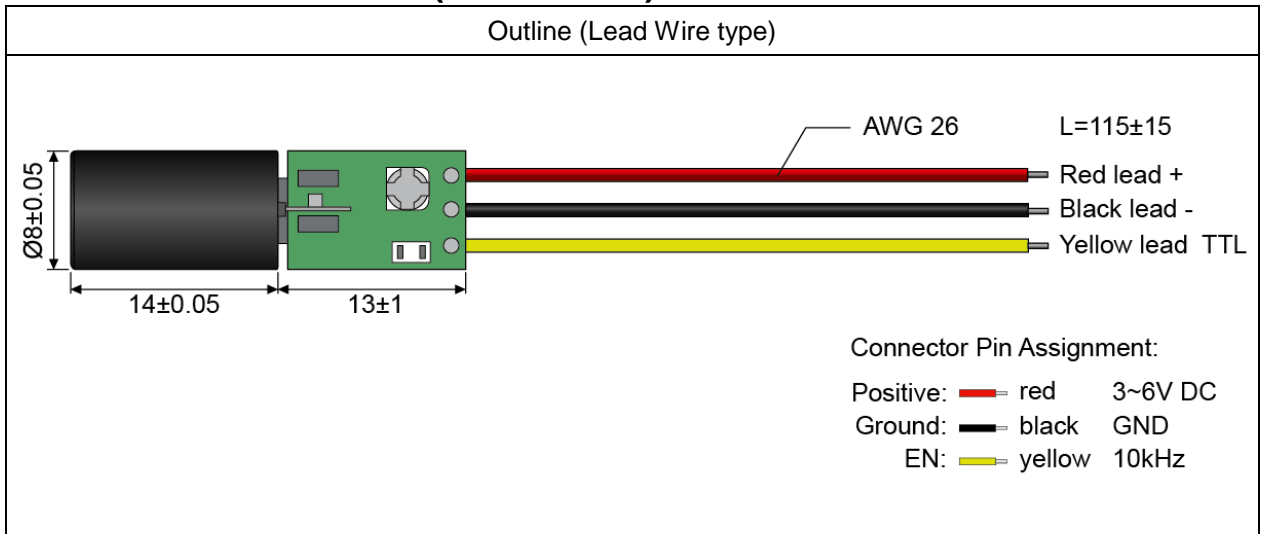
- TTL Modulation Red Dot Laser Module.
- CW to 10K HZ stable power output for demanding power and speed are of important.
- This module has integrated optic, laser diode, and APC with TTL control driver circuit.
- APC Driver Circuit enables the Laser output power safe and constant.
- Dimensions : Ø8 x 27 mm (Ø0.314" x 1.06")
- Wavelength : 630~645nm
- Laser power output : LPA - Class IIIa – less than 4mW.  
LPT - Class II – less than 1mW.
- Beam Divergence (Half Angle) : < 0.4 mRad
- 3~6 VDC operation.
- Connection type : Lead wire

#### APPLICATIONS:

- Free space low frequency optical communication.
- Laser base measurement.
- 2D, 3D position, sampling.
- Medical application.
- Optical lighting.
- Counting.
- Scanning.
- I2C and Can Bus application.
- Medical science.

## VLM-635-31 Series

### OUTLINE DIMENSIONS (UNITS: mm)



### SPECIFICATIONS

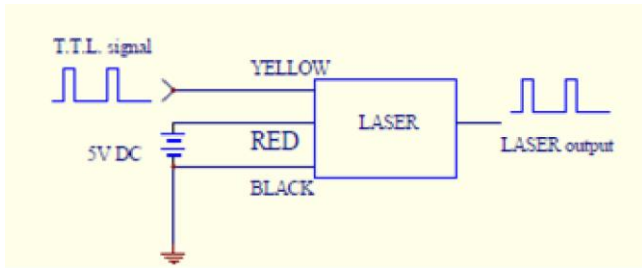
SPECIFICATIONS		VLM-635-31	
		LPT	LPA
1	Dimensions	$\varnothing 8 \times 27$ mm ( $\varnothing 0.314'' \times 1.06''$ )	
2	Weight	2.4g	
3	Operating voltage (Vop)	3~6 VDC	
4	Operating current (Iop)	Less than 40mA	Less than 60mA
5	Laser power output	Less than 1mW	Less than 4mW
6	Laser class	Class II	Class IIIa
7	Wavelength at peak emission ( $\lambda_p$ )	630~645nm	
8	Collimating lens	Aspherical Glass lens	
9	Output aperture	5mm	
10	Beam shape	Ellipse	
11	Spot size at 10M	$5 \pm 1$ mm	
12	Divergence(Half angle)	Less than 0.4mRad	
13	Beam alignment	Less than $3^\circ$	
14	Operating temp. range*	$-20^\circ\text{C} \sim +60^\circ\text{C}$	
15	Storage temp. range	$-40^\circ\text{C} \sim +85^\circ\text{C}$	
16	Housing material	Aluminum	
17	Potential of housing	Insulated	
18	Mod. Frequency range	0-10kHz	
19	Operation mode**	TTL(High on)***	
20	EN input current	1 to 20mA	

## VLM-635-31 Series

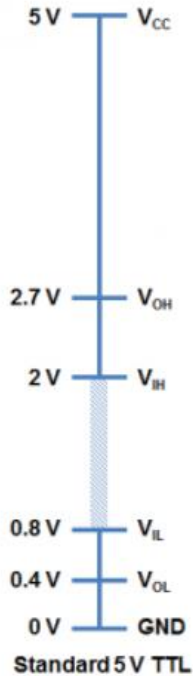
21	Electrostatic discharge (ESD)	30KV
22	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.
23	Wire type	1007-26AWG
24	Cable length	115±15mm
25	Mean time to failure(MTTF) 25°C	10000hrs
26	Application	Modulation
27	Suggestion work distance	1~10 meters / 3~40 feet

\* 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.

\*\* TTL Operation Function Diagram



\*\*\* TTL Level



## VLM-635-31 Series

### ORDER CODE

Order Code	Wavelength	Laser Power Output	Laser Class	Connection Type
VLM-635-31 LPA	635 nm	Less than 4mW	Class IIIa	Lead Wire
VLM-635-31 LPT	635 nm	Less than 1mW	Class II	Lead Wire

### SAFETY LABEL

