

Laser Module

VM-0450B-002M-AL-0A0

Features

- Uniform and detail-oriented
- Collimated beam
- Manual beam spot adjustment
- Low thermal resistance
- High power conversion efficiency

Applications

- Industrial application
- Infrastructure alignment
- Indication, positioning and testing
- Machining vision

Description

This product VM-0450B-002M-AL-0A0 is integrated with imported and high-quality laser diodes and is shielding with copper for better heat dissipation.

Compared with traditional frequency doubles laser and LED, it enables to provide a higher peak power and lower power consumption, subtle wavelength shift with temperature and good reliability. It provides narrow emission angle without optical and thermal compensation, which allow various operation environments.

This product with laser diodes with small-sized, light, low price, long life, low power consumption, fast frequency response and manual beam spot adjustment.

It can be applied to infrastructure alignment, positioning, indication, inspection, machine vision and other fields for ideal visible laser source.



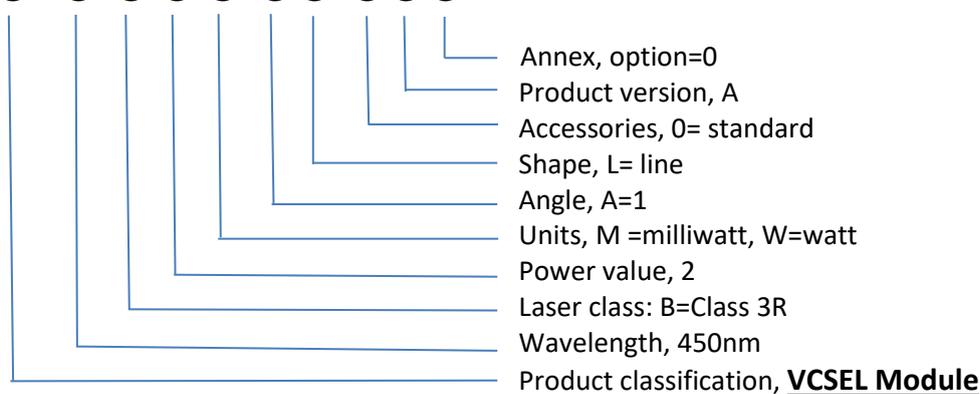
PRODUCT IDENTIFY

Part Number	Description
VM-0450B-002M-AL-0A0	450nm Class 3R Laser module

CODE RULES

VM- 0450 B-002 M- A L- 0 A 0

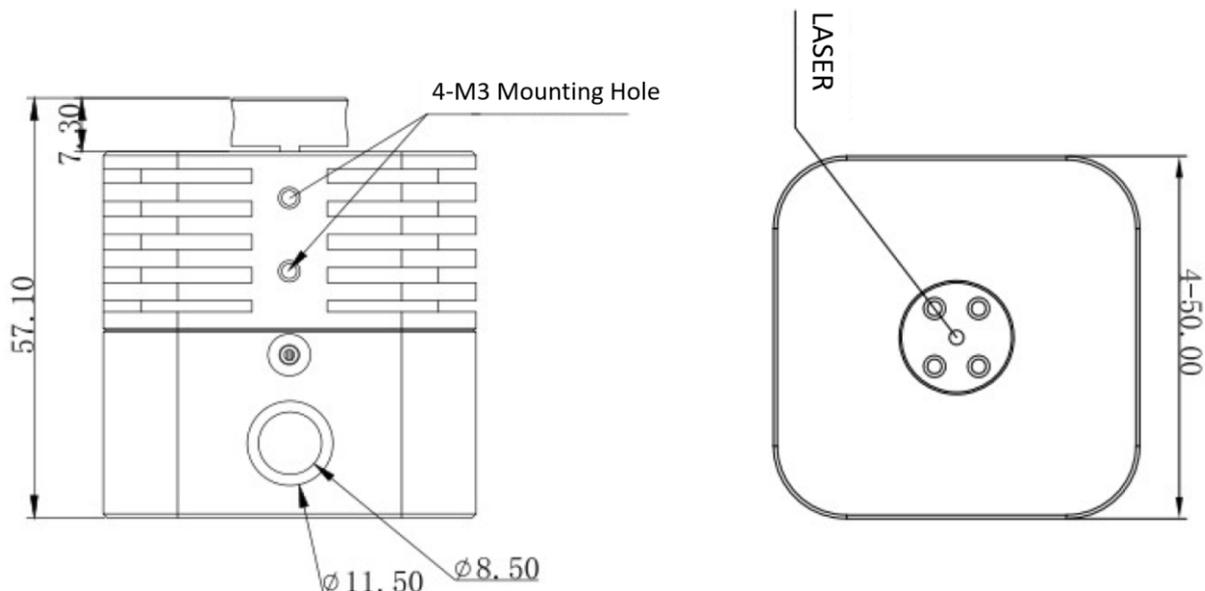
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I. Specifications

Parameters	Typical values	Unit	Remarks
Beam Distance	10	m	Customizable
Wavelength	450	nm	-
Optical power	2	mW	-
Operating current	3	mA	-
Power consumption	36	mW	-
Beam emission angle	≤0.8	mrad	-
Operating voltage	DC 12	V	-
Storage temperature	-40 to +80	°C	-
Operating temperature	-20 to +60	°C	-
Waterproof	IP20	-	-
Dimensions	L50 x W50 x H57	mm	-
Beam spot	line	-	-
Beam spot dimensions	L40 x W0.5	mm	@50mm
Lifetime	20000	Hrs	-
Anode	Red	-	-
Cathode	Black	-	-
Laser classification	Class 3R	-	Laser goggle when using
Weight	225	g	Customizable

II. Mechanic schematic



III. Laser Product Safety

The output power of this module is classified as class 3R, one can refer to IEC 60825-1:2014 《Laser Product Safety: Part 1:Devices classification, requirements and user's Manual》 .

IV. Copyright Statement

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V. Revision History

Revisions	Date	Description
V.01	26 June 2020	The first official version