

High Peak Power 1064nm Laser Module for LiDAR

AL01 Series



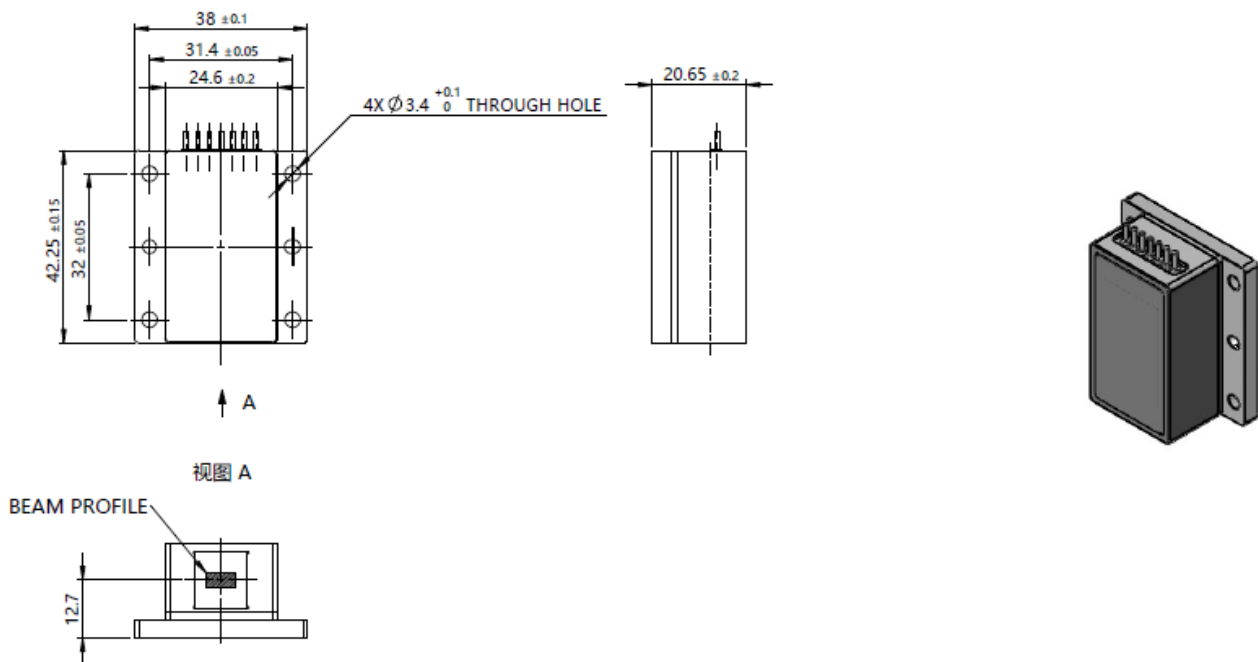
Features

- Megawatt peak power
- Automotive qualified
- Easy integration
- Large angle FOI
- Built-in TEC
- Built-in flash detector

Applications

- Flash LiDAR
- 3D sensing
- Scanning LiDAR
- Surveillance / Night vision

Product Dimensions (mm)



Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.

Specifications

Product Code		(Typical Customizations)	
Part No. ¹		FL-AL01-1.5-125x25-1064	FL-AL01-1.5-60x45-1064
Optical Data ²			
Centroid Wavelength λ	nm	1064	1064
Wavelength Tolerance	nm	± 10	± 10
Laser Energy ³	mJ	>1.5	>1.5
Laser Pulse Width	ns	<10	<10
Repetition Rate	Hz	30Hz	30Hz
Field of Illumination - Fast Axis ⁴	degree	125	60
Field of Illumination - Slow Axis ⁴	degree	25	45
Electrical Data ²			
Operating Current I_{op}	A	<120A	<120A
Threshold Current I_{th}	A	<30A	<30A
Operating Voltage V_{op}	V	<3.0	<3.0
Thermal Data			
Operation Temperature ⁵	°C	-40~80	-40~80
Storage Temperature	°C	-40~105	-40~105
Other Data			
Hermeticity	ccHe/cm ³	<1×10 ⁻⁸	<1×10 ⁻⁸

¹Part No. = Brand Code - Series - Laser Energy - FOV - Centroid Wavelength.

²Data at 25°C temperature, unless otherwise stated.

³Laser energy can be customized based upon request.

⁴Field of illumination (FOI) angles are defined by FWHM. FOI can be customized based upon request.

⁵Ambient temperature during operation. Can be further extended to -40~90°C upon request.

Warning: Laser output from this laser module is **NOT** eye-safe. Additional system optical design is needed to be in place to make the laser eye-safe. The design and verification responsibility to ensure eye-safe will be fully on system integrator. Focuslight assumes no responsibility for any damage caused by using this laser module without necessary eye-safety protection.

