

VCSEL Line Beam Transmitter Module for LiDAR

LX02 Series



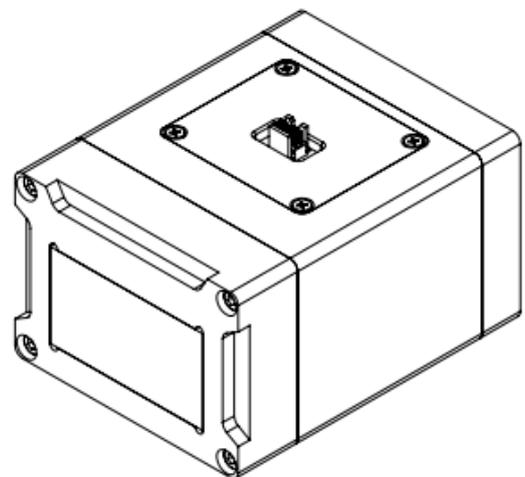
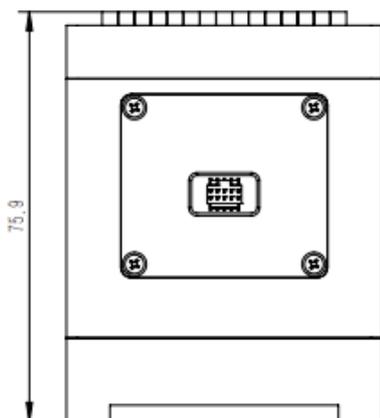
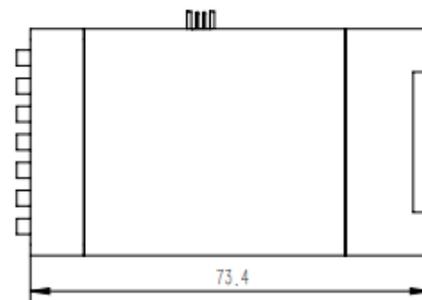
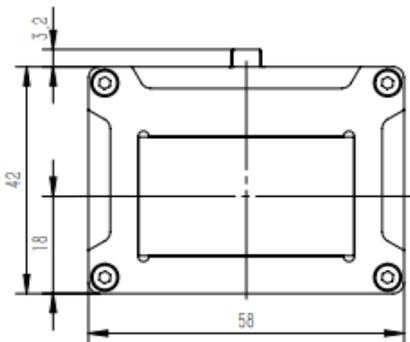
Features

- VCSEL based, line beam uniformity > 80%
- Peak power >1000W @ <5ns short laser pulses
- Line horizontal divergence <0.15°

Applications

- LiDAR
- 3D Sensing
- Industrial Sensing

Product Dimensions (mm)



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

Product Specifications (Prototype)

Product Code

Part No. ¹	FL-LX02-1000-905-0.15x23
Test Condition	100ns, 100kHz, 25°C

Optical Data	Unit	Min. Value	Typ. Value	Max. Value
Centroid Wavelength λ	nm	895	905	915
Wavelength Temp. Coefficient	nm / °C	/	0.07	/
Max Output Power ²	W	800	1000	1200
Optical Pulse Width @ FWHM	ns	3	4	5
FOV in Fast Axis @ FW 1/e ² (Horizontal)	°	0.1	0.12	0.15
FOV in Slow Axis @ FWHM (Typical, Vertical)	°	22	23	24

Electrical Data

Pulse Repetition Frequency	kHz	10	35	100
Operating Voltage V_{op1}	V	7	10	12
Operating Voltage V_{op2}	V	15	30	35
Input Trigger Voltage Amplitude	V	/	5	/
Input Trigger Pulse Width	ns	/	100	/
Input Trigger Pulse Impedance	load Ω	/	50	/

Other Data

Operation Temperature	°C	-10	25	65
Storage Temperature	°C	-40	25	105
Product Dimensions	mm	/	75.9x58x42	/

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

² A non-condensing environment is required for storage and operation below ambient dew point.



Product Test Results (Prototype)

