

VCSEL Line Transmitter LiDAR Module

LX01 Series



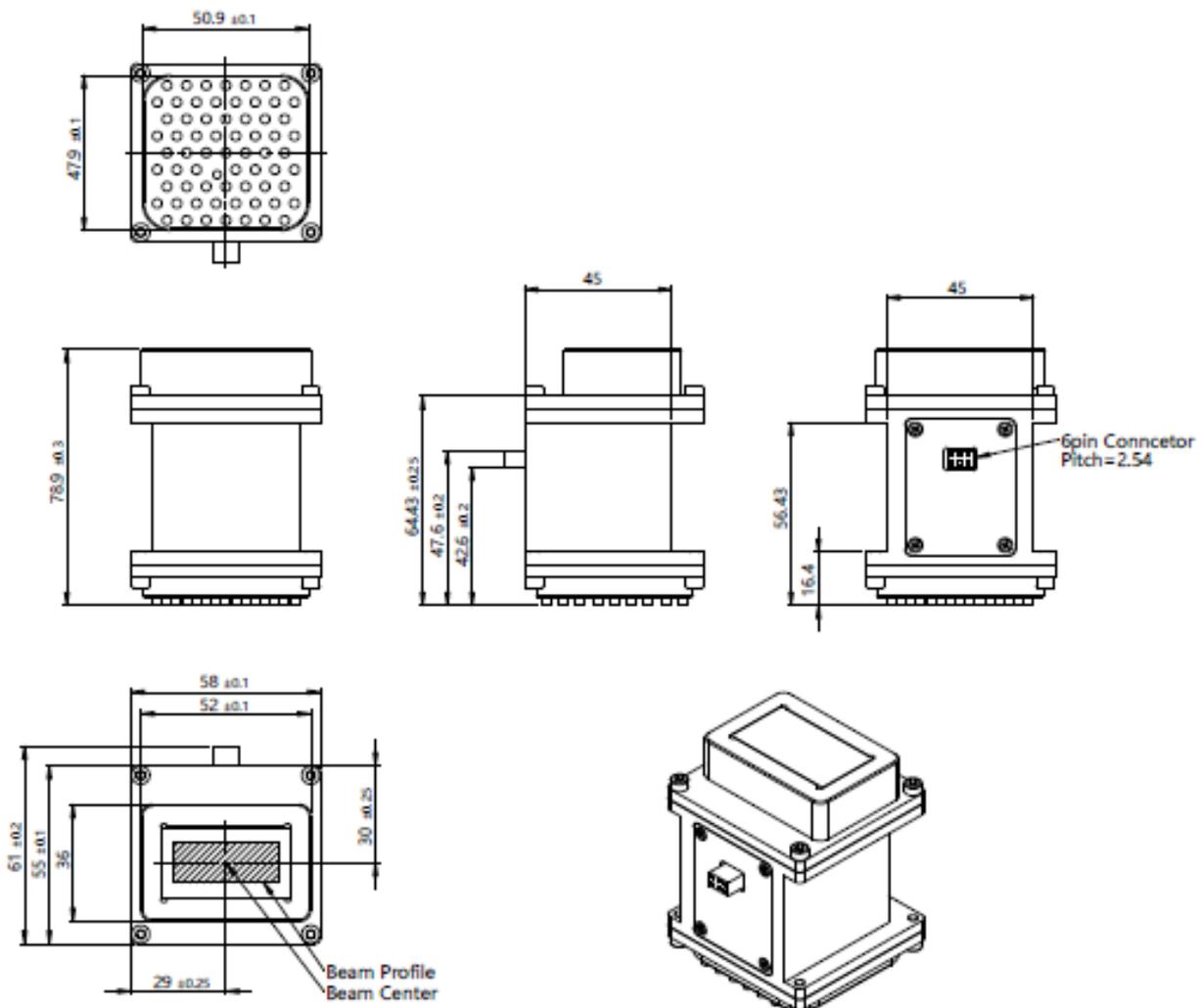
Features

- The first opto mechatronic VCSEL line beam module in the industry
- Peak power 200W
- Horizontal axis divergence 0.15°
- Vertical axis light intensity uniformity > 80%

Applications

- LiDAR ranging
- 3D Sensing

Product Dimensions (mm)



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

Product Specifications (Prototype)

Product Code	LXT300002
Part No. ¹	FL-LX01-200-905-0.15x23
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	/	0.08	/
Output Power ²	W	200	210	220
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	7	12
Operating Voltage V_{op2}	V	20	100	100
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	/	58*60*78.9	/

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

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



Product Test Results (Prototype)

