

# Structured Light

Lumispot OEM Machine Vision Solutions



- 01** Compact Design
- 02** High Parallelism
- 03** Uniform Light Spot
- 04** Stable Operation at High and Low Temp.

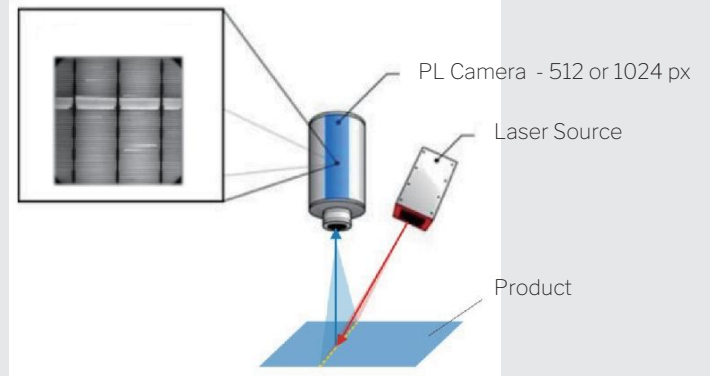


## Application:

- 3D Reshaping;
- Rail Wheelset Inspection, Track Inspection;
- Surface Inspection
- Volume Measurement
- Defect Detection;
- Solar Energy Inspection

- ✓ non-destructive
- ✓ non-contact

Photoluminescence (PL) imaging

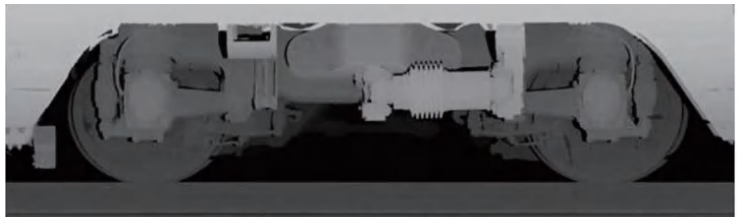


Single/Multi Line Structured Light Source

Vision Inspection System

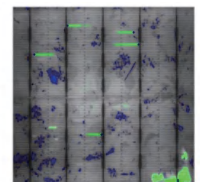
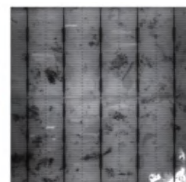
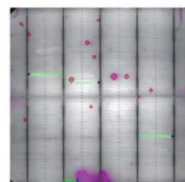
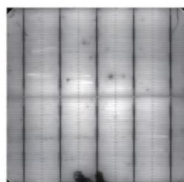
Illumination Laser

Laser Lens



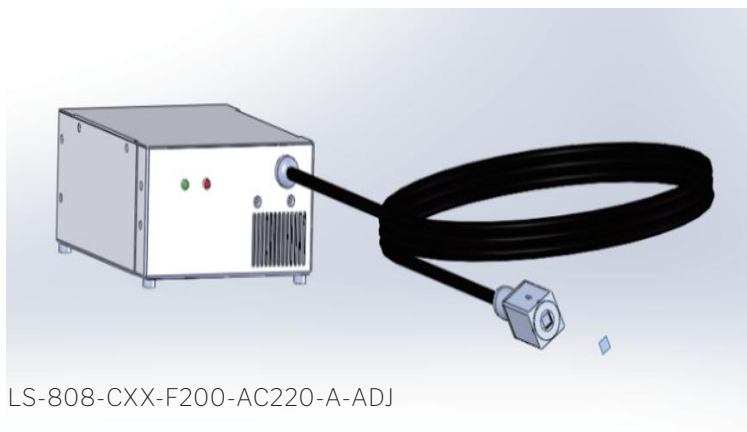
Monocrystalline Solar Cells

Multicrystalline Solar Cells



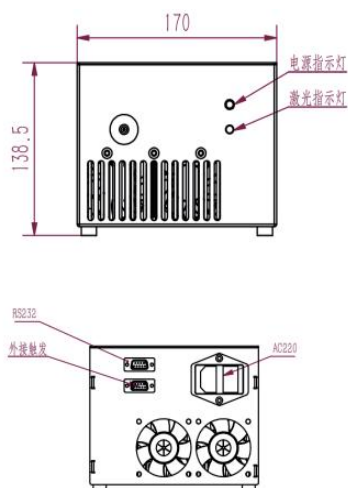
# Linear Light Spot Supplemental Light Source

## Technical Datasheet

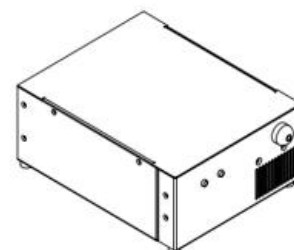
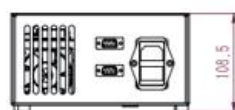
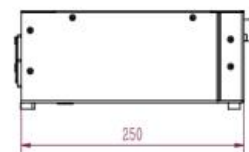
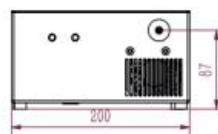
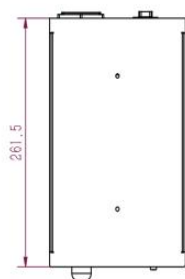


LS-808-CXX-F200-AC220-A-ADJ

Output Power	15/25/50/80 (Customization Support)	W
Central Wavelength	808nm±10nm (Constant Temp.)	nm
Wavelength Variation Range	±10	nm
Illumination Angle	75/110 (Customization Support)	°
Illumination Distance	0.2	m
Spot Shape	Linear Light Spot	
Operating Voltage	AC220	V
Power Consumption	≤100/150/200/280	W
Operating Mode	CW/Pulse	
Communication Interface	R232	
Control Mode	External Continuous/Pulse Mode; Serial Port Pulse Mode;	
Operating Temp.	+25-+35	°C
Weight	15W/25W/50W: ≤6; 80W: ≤10;	kg
Temperature Protection	Laser power-off at high temperature, automatically turns on when the temperature is restored to within 65°C	
Dimensions	15W/25W/50W: 250×200×108.5 80W: 261.5×170×138.5	mm
Heat Dissipation Method	Air Cooled	



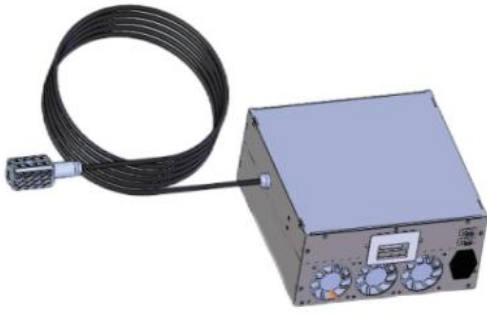
80W Laser System Outline Diagram



15W/25W/50W Laser System Outline Diagram

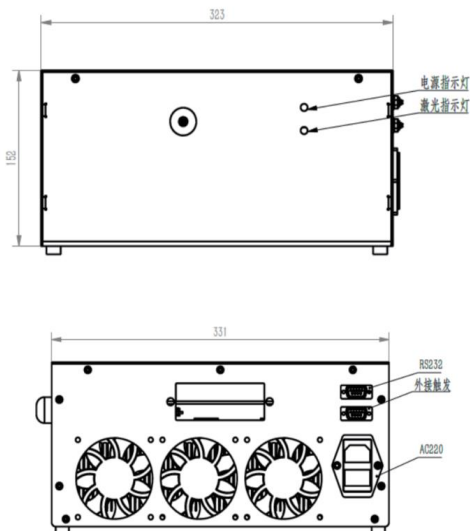
# Linear Light Spot Supplemental Light Source

## Technical Datasheet

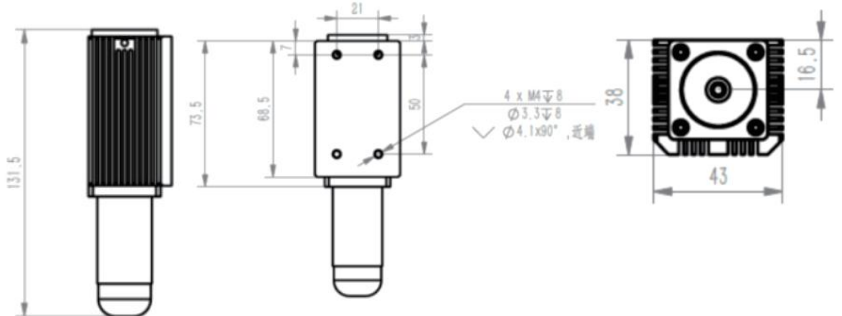


LS-915-C200-F200/135-AC220-A-ADJ

Output Power	200 (Customization Support)	W
Central Wavelength	915nm±10nm (Room Temperature)	nm
Wavelength Variation Range	±10	nm
Illumination Angle	75/110 (Customization Support)	°
Illumination Distance	0.2	m
Spot Shape	Linear Light Spot	
Operating Voltage	AC220	V
Power Consumption	≤600	W
Operating Mode	Continuous/Pulse	
Communication Interface	R232	
Control Mode	External Continuous/Pulse Mode; Serial Port Pulse Mode;	
Operating Temp.	+25-+35	°C
Weight	≤20;	kg
Temperature Protection	Laser power-off at high temperature, automatically turns on when the temperature is restored to within 65 degrees Celsius.	
Dimensions	331×323×152	mm
Heat Dissipation Method	Air Cooled	



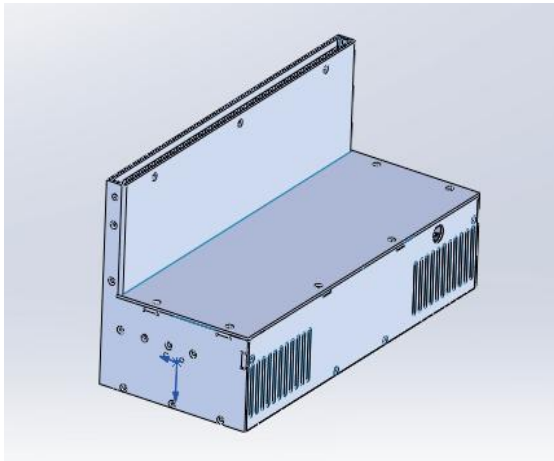
Laser System Outline Diagram



Line Light Spot Lens Outline Diagram

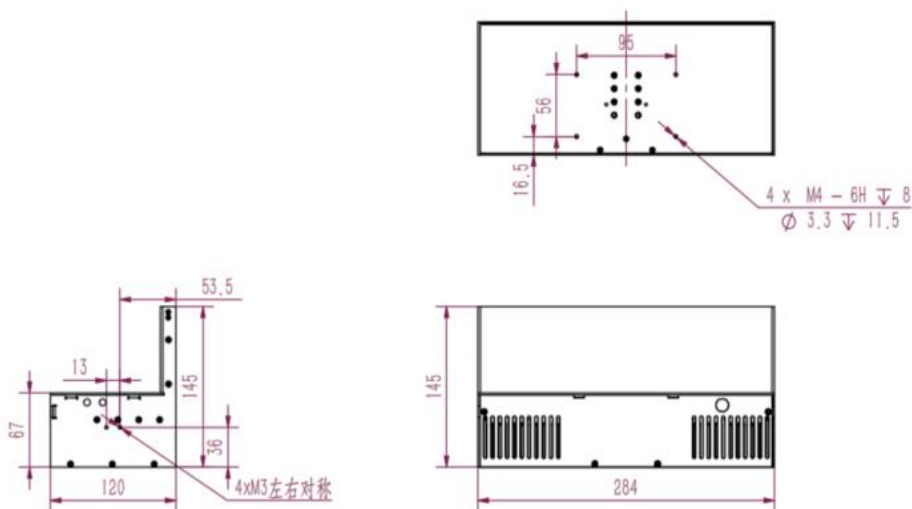
# Backlit Linear Light Spot Supplemental Light Source

## Technical Datasheet



LS-1064-C20-F105-DC24-A-OSW

Output Power	20	W
Central Wavelength	1064nm	nm
Wavelength Variation Range	±10	nm
Working Distance	10±2mm	mm
Spot Shape	Linear Light Spot	
Spot Uniformity	≥80	%
Applicable Silicon Wafer Specifications	≤230	mm
Operating Voltage	DC24	V
Power Consumption	≤120	W
Trigger Voltage	24	V
Operating Temp.	+25-+35	°C
Weight	≤10;	kg
Dimensions	284*145*120	mm
Heat Dissipation Method	Air Cooled	



Laser System Outline Diagram

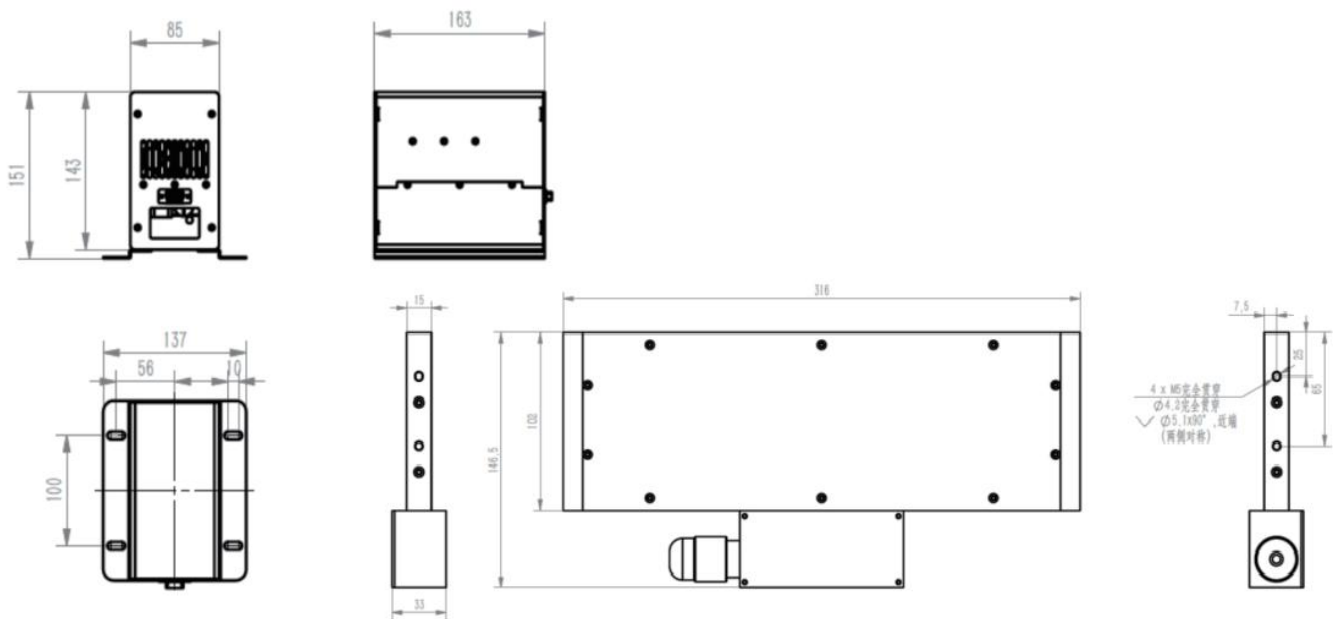
# Backlit Linear Light Spot Supplemental Light Source

## Technical Datasheet



LS-1064-C20-F105-DC24-A-FT

Output Power	20	W
Central Wavelength	1064nm	nm
Wavelength Variation Range	±10	nm
Working Distance	10±2mm	mm
Spot Shape	Linear Light Spot	
Spot Uniformity	≥80	%
Applicable Silicon Wafer Specifications	≤230	mm
Working Voltage	DC24	V
Power Consumption	≤120	W
Trigger Voltage	24	V
Operation Temp.	+25-+35	°C
Weight	≤10;	kg
Dimensions	Light source: 151*85*163	mm
	Lens part: 316*33*146.5	
Heat Dissipation Method	Air Cooled	



Laser System Outline Diagram

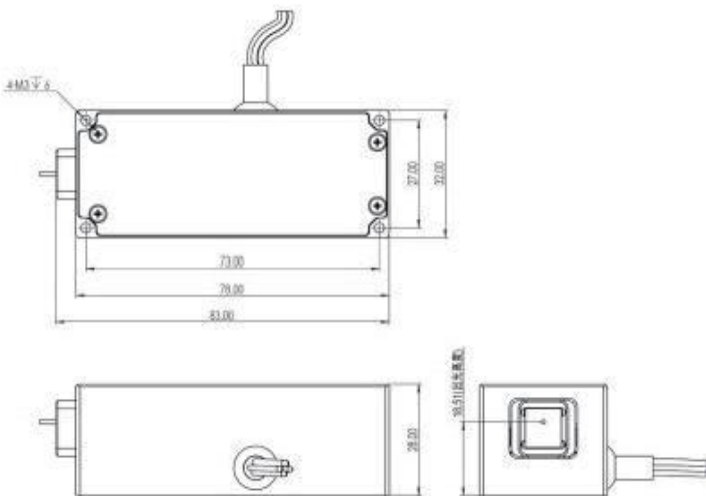
# Low-Power Structured Light Source

## Technical Datasheet

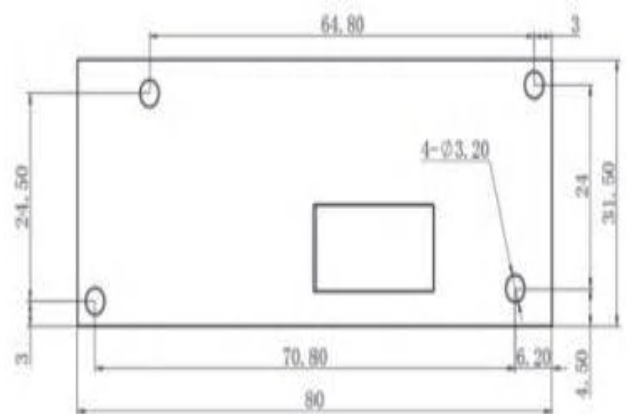


LGI-XXX-P5-DXX-XX-DC24

Output Power	≤5	W
Central Wavelength	808/915	nm
Wavelength Variation Range	±10	nm
Fan Angle (in degrees)	15/30/60/90/110(Customizable)	
Line Width	0.5-2.0	mm
Operating Voltage	DC12-24	V
Power Consumption	≤10	W
Working Mode	Continuous/ Pulse(1-50KHZ)	KHZ
Laser Control Mode	TTL(High Level On)	
Power Control	485 Communication Protocol Support	
Temp. Protection	Support	
Working Temp.	-30~50	°C
Storage Temp.	-40~70	°C
Cooling Method	Natural Heat Dissipation	
Dimensions	83*28*32	mm



Laser Dimensions



Circuit Board Dimensions

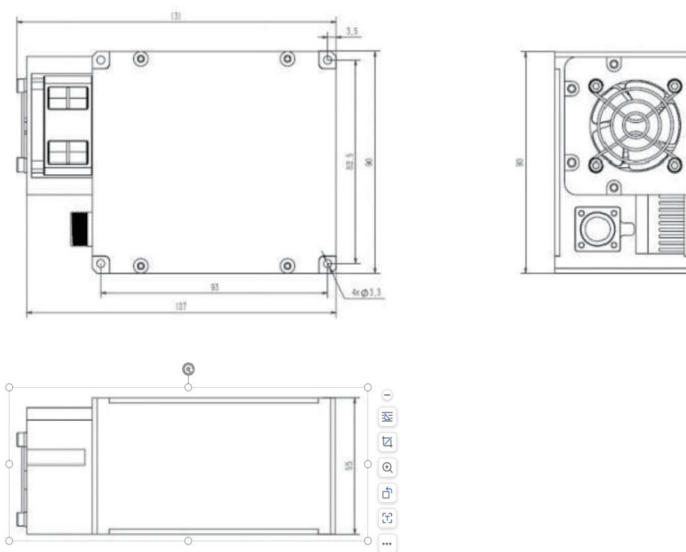
# Low-Power Structured Light Source

## Technical Datasheet



LGI-XXX-CX-DXX-XX-DC24-A

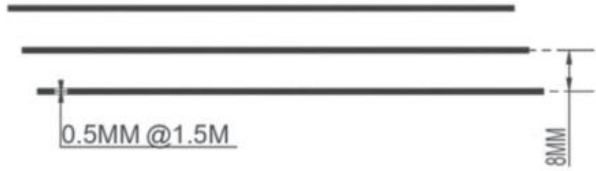
Output Power	15-18(Continuous:15,Pulse :18)	W
Central Wavelength	808/915	nm
Wavelength Variation Range	±10	nm
Fan Angle (in degrees)	15/30/60/90/110(Customizable)	
Line Width	0.5-2.0	mm
Operating Voltage	DC12-24	V
Power Consumption	≤36	W
Working Mode	Continuous/Pulse (1-50KHZ)	KHZ
Laser Control Mode	TTL(High Level On)	
Power Control	485 Communication Protocol Support	
Temp. Protection	Support	
Working Temp.	-30~50	°C
Storage Temp.	-40~70	°C
Cooling Method	Natural Heat Dissipation	
Dimensions	106*90*55	mm



Laser System Outline Diagram

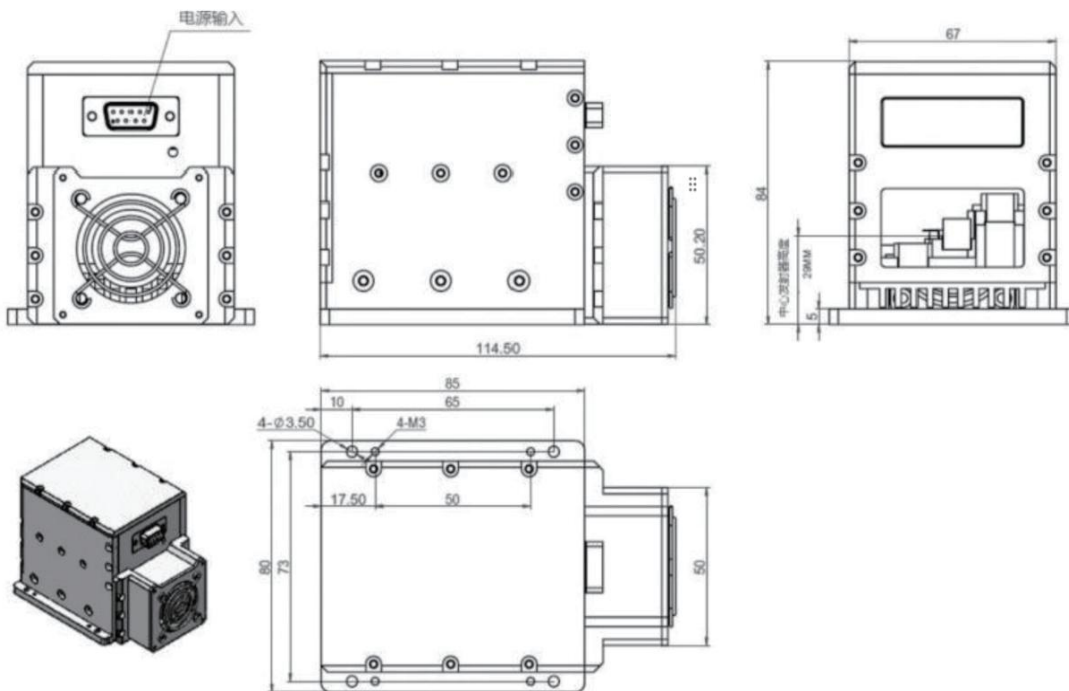
# Multi-Line Structured Light Source

## Technical Datasheet



LGI-808-P5\*3-DXX-XXXX-DC24

Output Power	15	W
Central Wavelength	808	nm
Wavelength Variation Range	±10	nm
Fan Angle (in degrees)	15/30/60/90/110(Customizable)	
Number of Beams	3	pc
Line Width	1.0mm@2.0m	mm
Working Voltage	DC24	V
Power Consumption	≤25	W
Control Mode	TTL	
Frequency Range	0-15K	HZ
Duty Cycle	≤20	%
Operating Temperature	-30~50	C
Storage Temperature	-40~70	C
Cooling Method	Air Cooled	
Dimensions	114.5*80*84	mm



Laser System Outline Diagram



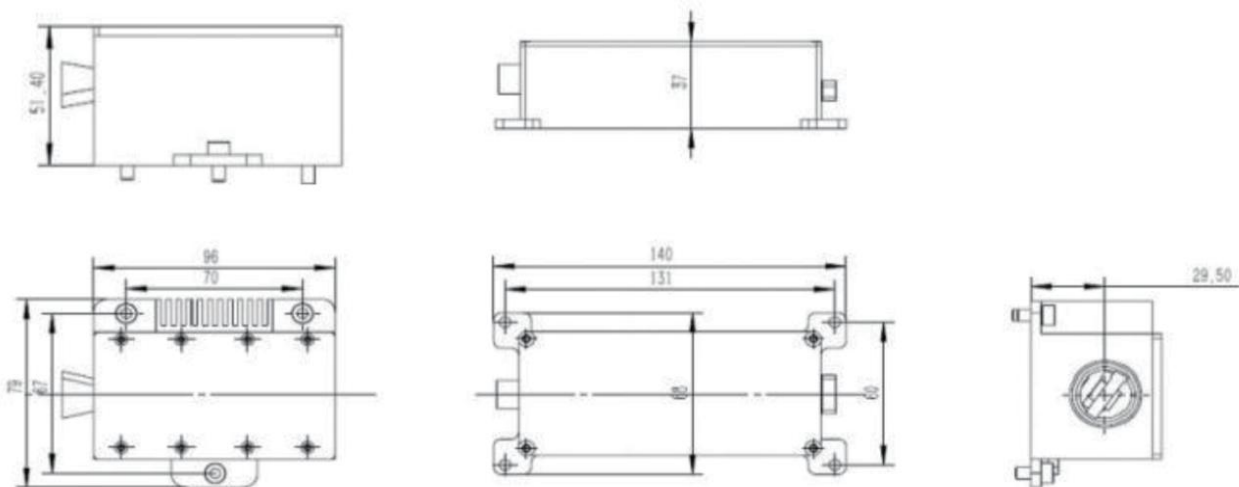
# Multi-Line Structured Light Source

## Technical Datasheet



LGI-808-P5-DL25-XXXX-DC24

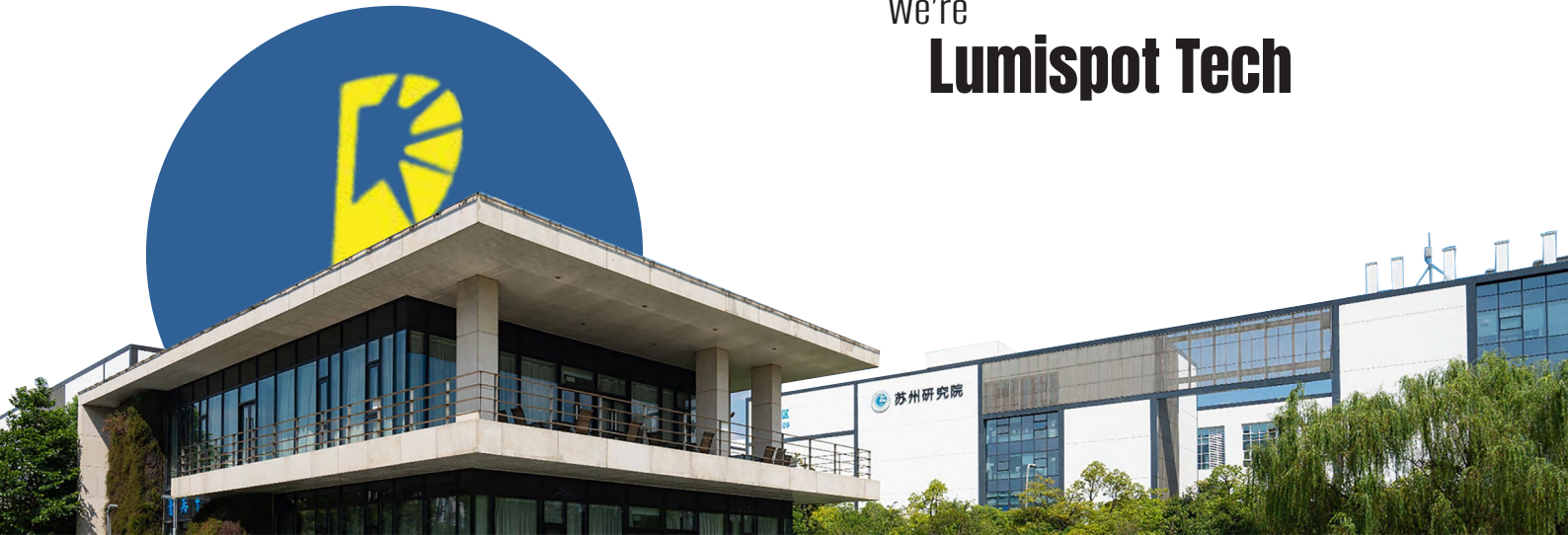
Output Power	5	W
Central Wavelength	808	nm
Wavelength Variation Range	±10	nm
Fan Angle (in degrees)	33(Customizable)	
Number of Beams	25(Customizable)	
Beam Angle	1.37	°
Line Width	1.0@400±50	mm
Working Voltage	DC24	V
Power Consumption	≤25	W
Control Mode	Continuous/ Pulse	
Frequency Range	1-30K	HZ
Duty Cycle	0.5≤Dutycycle≤30	%
Operating Temperature	-30-50	°C
Storage Temperature	-40-70	°C
Cooling Method	Air Cooled	
Dimensions	96*79*51.4	mm



Laser System Outline Diagram

# Company Profile

About Lumispot



We're  
**Lumispot Tech**

**¥ 78**million  
Register Capital

**6+**  
Ph.D

**80%**  
Proportion of Talent

**150+**  
Patents



Lumispot Technology Group was established in 2010, located in Wuxi with registered capital of CNY 78.55 million, and production area of about 25,000 square meters and more than 500 employees. Through more than 14 years of efforts and development, Lumispot has become a leader in special laser information technology domain with a strong technical foundation.

Our expertise focusses on laser technology research & development, offering a wide range of products including laser diode, erbium laser, fiber lasers, solid-state lasers, and its system, such as laser rangefinder modules, LiDAR lasers, structured lasers, illumination systems, FOG components, dazzlers, etc. which are widely applied for defense & security, LiDAR system, remote sensing, inertial navigation, technical research, etc.

Our company is rewarded as National High-tech Enterprise and National Innovation enterprise, and more than 150 patent have been obtained.

## Contact

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**Illuminate Future From Laser**

We aim to become the global leader in laser special information domain.

