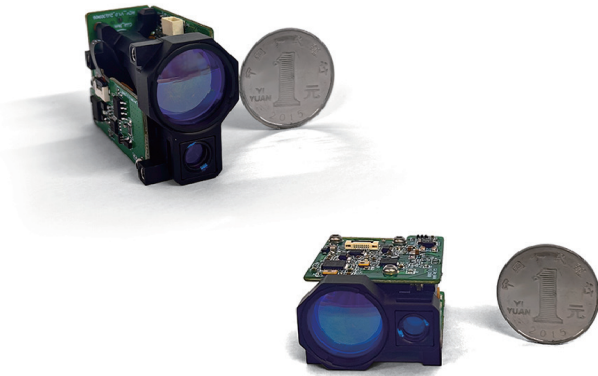


Laser Rangefinder Module Series

Featured Product - LSP-LRS-0310F



Lumispot



Light-Weight
Only Weighs ≈ 33g



Low power consumption
standby power ≤ 0.24W



Small Size
48*21*31 mm



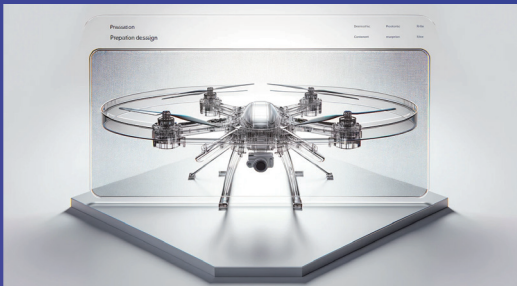
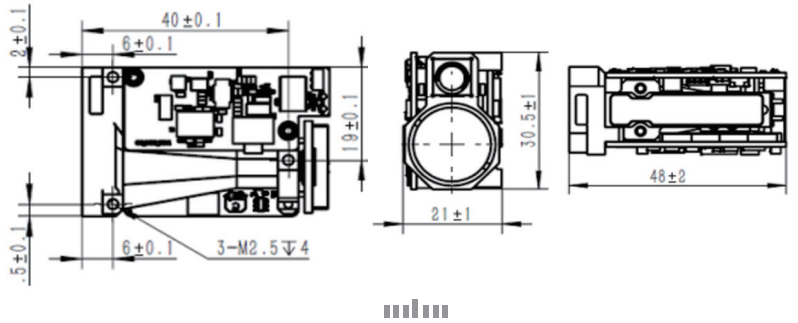
Defense grade temperature
-40~+70°C



High Precision
Accuracy ± 1m



Resistance to high impact
1000g



Adapted for small devices

Ranging Module

The module integrates an advanced laser, high-end transmitting and receiving optics, and a sophisticated control circuit. These components work together to provide a visible range of up to 3km under ideal conditions.

— Laser Ranging Expert

www.lumisource.com.cn

UAVs Distance Sensor

LSP-LRS-0310F ranging modules excel in UAV ranging, offering precision in a compact package. They're lightweight, space-efficient, and ideal for ensuring UAVs navigate, avoid obstacles, and maintain safe distances, enhancing flight safety and performance.



Scope Aiming and Targeting

A mini-sized ranging module offers superior portability and versatility, making it ideal for handheld device.

1535nm SERIES

3km Er-LRF Module



Technical Parameter



LSP-LRS-0310F

LSP-LRS-0310F Plus

Parameter	Numerical Value	
Human Eye Safety Level	Class I	
Laser Wavelength	1535±5nm	
Laser Beam Divergence Angle	≤0.6mrad	
Receiving Aperture	Φ16mm	
Distance Measurement Accuracy	Surpass ±1m (RMS)	
Distance Resolution	1~10Hz	
Distance Measurement Accuracy	≤30m	
Supply Voltage	≥98%	
False Alarm Rate	≤1%	
Minimum Measuring Range	<20m	≤15m
Distance Measurement Capability	≥3km (Vehicle: 2.3m×2.3m) ≥1.5km (People: 1.7m×0.5m)	≥5km (Big Goals: ≥3m×3m) ≥3.5km (Vehicle: 2.3m×2.3m) ≥2km (People: 1.7m×0.5m) ≥1km (UAV: 0.2m×0.3m)
Data Interface	RS422 serial port (customizable TTL serial port)	
Supply Voltage	DC 5~28 V	
Verage Power Consumption	≤1.5W (10Hz operation)	≤0.76W (1Hz operation)
Peak Power Consumption	≤3W	
Standby Power	≤0.4W (power consumption without distance measurement)	≤0.24W
Sleep Power Consumption	≤2mW (When POWER-IN pin is pulled low)	
Dimensions/mm	≤48mm×21mm×31mm	
Weight	33g±1g	
Working Temperature	-40°C~+60°C	-40°C~+70°C
Storage Temperature	-55°C~+70°C	-55°C~+75°C
Impact	75g@6ms (Up to 1000g impact, 1ms)	
Vibration	5~200~5 Hz, 12min, 2.5g	Universal low limit integrity vibration test
Multi Target Detection	Default support for primary objective, maximum support for 3 objectives	
Function	Single distance measurement/continuous distance measurement/multi-target distance measurement/target indication before and after distance selection/self check function/external power control	

①: Environmental conditions: visibility ≥ 12 km, humidity ≤ 70%.
②: Support customization



Lumispot



¥78million
Register Capital

9+
Ph.D

90%
Proportion of Talent

200+
Patents

Lumispot was founded in 2010, with its headquarters in Wuxi, boasts a registered capital of CNY 78.55 million. Our expansive facility covers an area of approximately 40,000 square meters and is powered by a dedicated team of over 500 employees. Over the past 14+ years, Lumispot has emerged as a frontrunner in the specialized field of laser information technology, underpinned by a robust technical foundation.

We specialize in the research and development of laser technology, providing a diverse portfolio of products. This range encompasses laser ranging module, laser rangefinder, laser pump source, semiconductor laser, fiber laser, and solid-state laser, as well as comprehensive systems including structured lasers, and dazzlers. Our products find extensive applications across various sectors such as defense and security, LiDAR systems, remote sensing, inertial navigation, and technical research.

Lumispot is recognized as a National High-tech Enterprise and a National Innovation Enterprise, a testament to our commitment to innovation and excellence. This is further evidenced by our impressive portfolio of over 200 patents, marking our significant contributions to the field of laser technology.

Contact

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Lumispot

Illuminate Future From Laser

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

