

SR Series

Eye-safe Laser Rangefinder Module

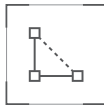
• Wavelength: 905nm • Eye Safety: Class 1



Description

The SR Series eye-safe laser rangefinder module is based on a 905nm semiconductor laser, delivering high performance and low power consumption while maintaining a compact and lightweight profile. It ensures reliable ranging performance even in adverse conditions such as rain, fog, and through protective windows. The module supports both single and continuous measurement modes and is widely used in applications such as civilian UAVs, outdoor observation, and handheld rangefinders. It features a UART (TTL 3.3V) data interface and is supplied with a GUI software and a full communication protocol command set, facilitating secondary development for users.

Highlights



Long Range:
1.2km / 2km



Small Size:
26x25x14mm



High Accuracy:
 $\pm 0.4m$



Lightweight:
10.5g



Low Power Consumption:
 $\leq 0.65W$



High Shock Resistance:
1200g, 1ms

Specifications

Product Model	SR1200	SR2000
Wavelength	905±10nm	
Eye safety	Class 1 (IEC 60825-1) Class 3R (FDA)	Class 1(IEC 60825-1)
Divergence	2.5×5mrad	
Range (Building)	2~1200m	2~2000m
Frequency	1~5Hz	
Accuracy	d≤800m: ±(0.4m+d×0.07%)m d>800m: ±1m (d represents distance, unit m)	
Detection probability	≥98%	
False alarm rate	≤1%	
Interface	UART(TTL_3.3V)	
Operating power	≤0.50W@25°C	≤0.70W@25°C
Weight	10.5±0.5g	
Dimension	26×25×14mm	
Mechanical shock	1200g, 1ms	
Vibration	5~50~5 Hz, 1 octave per minute, 2.5g	
Operation temperature	-20~+70°C	
Storage temperature	-25~+75°C	

Applications



UAV Pods



Handheld Laser Rangefinders



Targeting Optics



Observation Systems

Company Profile

Raytron Microelectronics Co., Ltd. is a wholly-owned subsidiary of Raytron Technology Co., Ltd., providing global customers with infrared detectors, core modules, and industry solutions.

Our products are widely used in various fields, including infrared temperature measurement, night vision observation, machine vision, intelligent driving, Commercial Drone, smart industry, security monitoring, Internet of Things, medical epidemic prevention and gas detection.

With the mission of "to create incremental value for customers with technological advancements", we are committed to leaving a name in the history of constantly expanding human perception capabilities.



Official Website



LinkedIn Official Account

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