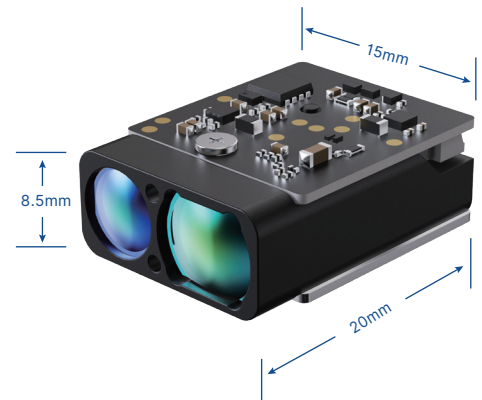
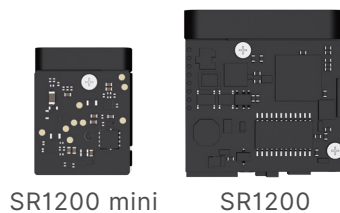


SR1200 mini

1,200 m Miniature Laser Rangefinder Module

- Wavelength: 905 nm
- Class I

SR1200 mini is 72% smaller than SR1200.



Product Introduction

1,200 m miniature laser rangefinder module of the SRmini series is built based on a 905 nm semiconductor laser and SPAD detection technology. It complies with Class 1 eye-safe standards and provides accurate range measurement across a wide dynamic range from 2 m to 1,200 m. The device features an extremely lightweight design, high measuring frequency, extremely low power consumption, and high environment adaptability as its core strengths; it also integrates key capabilities such as adaptive frequency ranging and highly reliable data output. These features make it suitable for small Commercial Drone, handheld portable devices, lightweight security monitoring systems, and consumer-grade engineering mapping scenarios that have stringent requirements for device size, weight, and power consumption. As a result, it provides industry customers with highly integrated, highly reliable, and easy-to-implement lightweight ranging solutions.

Product Highlights



- Maximum ranging: 1,200 m



- Measuring accuracy of up to ± 1 m



- SWaP design:
20 × 15 × 8.5 mm; 3.5 ± 0.5 g; ≤ 0.65 W



- Adaptive measuring frequency: 1.5–10 Hz



- Operating temperature: -20°C–+70°C



- UART interface

Specifications

Product Model	SR1200 mini
Basic Features	
Laser Wavelength	905 ± 10 nm
Eye Safety Level	Class 1 (IEC 60825-1)
Laser Divergence Angle	≤ 5 mrad
Ranging Performance (Buildings)	2–1,200 m
Ranging Accuracy	d ≤ 400 m: ± 1 m; d > 400 m: ± 1.5 m
Ranging Frequency	1.5–10 Hz (adaptive)
Accurate Measuring Rate	≥ 98%
False Alarm Rate	≤ 1%
Electrical Characteristics	
Communication Interface	UART (TTL_3.3V)
Supply Voltage	DC 3–5 V
Operating Power Consumption	≤ 0.65 W@25°C
Starting Time	≤ 200 ms
Physical Characteristics	
Weight	3.5g ± 0.5 g
Dimensions	20mm × 15mm × 8.5 mm
Shock	1,000 g; 2 Hz; 10,000 cycles
Vibration	5–50–5 Hz, 1 octave/min, 2.5 g
Environment Adaptability	
Operating Case Temperature	-20°C–+65°C
Storage Case Temperature	-25°C–+70°C
Reliability	MTBF ≥ 1,500 h

*The information is for illustrative purposes only. The pictures and technical specifications are subject to change without notice.

Applications



Outdoor handheld



Civil security



Commercial Drone



Engineering mapping

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



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