

LR Series Eye-Safe Laser Rangefinding Module



Product Features

- The smallest rangefinding module with a comparable performance
- The lightest rangefinding module with a comparable performance
- High measuring frequency, supported up to 10Hz

Applications

- UAV, security, engineering survey, field search and rescue



Ultra-Long



Eye-Safe
Class 1



Ultra-Light



Ultra-Compact



Mono-Pulse
Rangefinding



Super Stable



UAV



Security



Engineering



Field Search and Rescue

Specifications

Model		LR3000	LR6000	LR8000	LR12000	
Basic	Laser Wavelength	1535±5 nm				
	Eye-Safe	Class 1 (IEC 60825-1)				
	Maximum Measuring Range	Building	4200m	7100m	10000m	16000m
		Vehicle	3500m ¹⁾	6000m ²⁾	8000m ³⁾	12000m ⁴⁾
		Person (0.5 × 1.7m)	2000m	3800m	4500m	5900m
		UAV (0.2×0.3m)	1000m	2000m	2600m	3200m
	Minimum Measuring Range	20m			50m	
	Distance Measuring Accuracy	±1m			±2m	
	Distance Measuring Frequency	1~10Hz (adjustable)				
	Laser Emission Aperture	Φ7.5mm	Φ11mm			
	Laser Divergence Angle	~0.6mrad	~0.3mrad			
	Receiving Aperture	Φ16mm	Φ25mm		Φ40mm	
	Accuracy	≥98%				
	False Alarm Rate	≤1%				
	Multi-Target Detection	3 targets				
Range Resolution	20m	50m				
Electrical	Communication Interface	UART (TTL_3.3V)				
	Baud Rate	9600/57600/115200 (default)				
	Power Supply Mode	DC4.5-16V				
	Power Consumption	≤2w	≤4w			
	Peak Power Consumption	7w@12V	14 W @ 12 V			
	Standby Power Consumption	≤1mw (Power ON < 0.3V)				
Physical	Weight	32±1g	58±1g		127±2g	
	Dimensions	48×31×25mm	65×48×32mm		82×58×47mm	
	Shock	1200g, 1ms	75g, 6ms			
	Vibration	5~50~5Hz, 1 octave/min, 2.5g				
Environment	Operating Temperature	-40~+70°C				
	Storage Temperature	-55~+75°C				

Test conditions:

1) 2.3 × 2.3m, 30% reflectance, 8km visibility; 2) 2.3 × 2.3m, 30% reflectivity, 12km visibility;
3) 2.3 × 4.6m, 30% reflectance, 12km visibility; 4) 2.3 × 4.6m, 30% reflectivity, 25km visibility.