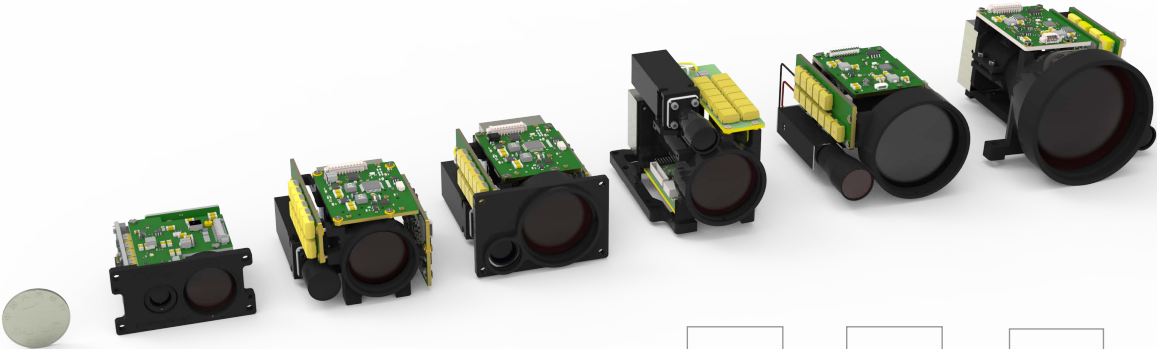









# YFR - LRF S Series

## S Series Laser Ranging Modules

YFR-LRF S series class-1 eye-safe laser ranging modules are independently researched&developed based on the 1535nm erbium-glass laser, which adopts monopulse ranging mode with a maximum measuring range up to 10km and UART (TTL\_3.3V), RS232 and RS422 electrical interfaces (one of three, optional). Users can conduct secondary development very conveniently by utilizing the provided PC test software, instruction set and communication protocols.

Light weight, compact and stable performance etc. are some of the key features of the YFR-LRF S series laser ranging modules.



-   
 10km  
 Far Ranging
-   
 Class-1  
 eye safet
-   
 Light Weight
-   
 Compact
-   
 Stable  
 Performance
-   
 Monopulse  
 Ranging  
 Function
-   
 Convenient  
 Operation
-   
 Extensive  
 use

### Application

Hand-Held Rangefinder, Multi-Function Observation Instrument, Optoelectronic Sights and Pods, etc.



## Applicable Scenes



Border



Port



Outdoor



Airport

## Technical Specifications

Specification	Model	YFR-LRF0320S	YFR-LRF0425S	YFR-LRF0630S	YFR-LRF1050S
Eye Safety/Class		Class1/1M			
Max. Range		≥3000m <sup>1)</sup>	≥4000m <sup>1)</sup>	≥6000m <sup>2)</sup>	≥10000m <sup>3)</sup>
Min. Range		≤50m			
Ranging Accuracy		≤1m	≤2m		
Ranging Resolution		30m			
Detection Rate		≥98%			
False Alarm Rate		≤1%			
Multiple Targets Detection		5(the maximum number)			
Ranging Frequency		1~10Hz			
Optical Receiving Aperture		Φ20mm	Φ25mm	Φ30mm	Φ50mm
Divergence		≤0.60mrad	≤0.50mrad	≤0.35mrad	≤0.35mrad
Dimension (L×W×H)		≤52×54×28mm	≤72×55×41mm	≤80×56×40mm	≤100×79×60mm
Weight		≤75g	≤110g	≤135g	≤250g
Laser Wavelength		1535±5nm			
Data Interface		UART/RS232/RS422			
Supply Voltage		DC 9~15V			
Standby Power Consumption		≤50mW			
Cold Start Peak Power Consumption		≤14W			
Operating Peak Power Consumption		≤10W			
Operating Temperature		-40~+65°C			
Storage Temperature		-55~+70°C			
Vibration		5~50~5Hz, 2.5g	0.01~0.04g <sup>2</sup> /Hz, 20~2000Hz		
Shock Parameter		1500g, 1ms	75g, 6ms		

Notes:

- 1) Target size 2.3×2.3m, Reflectivity 30%, Observer visibility ≥8Km
- 2) Target size 2.3×4.6m, Reflectivity 30%, Observer visibility ≥10Km
- 3) Target size 2.3×4.6m, Reflectivity 30%, Observer visibility ≥15Km
- 4) Ranging accuracy ≤1m, optional

\*The datasheet above is for reference only. Images and technical specifications are subject to change without prior notice.