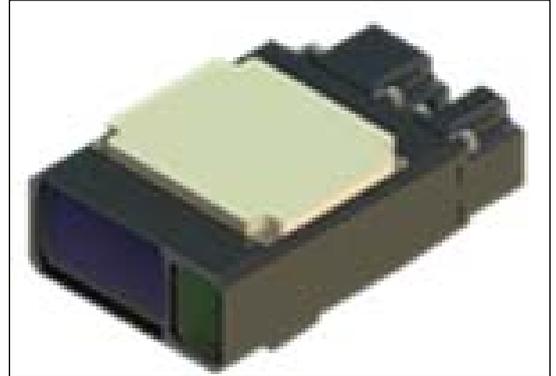


STC Series Laser Rangefinders

Laser rangefinder has a long lifetime with low power consumption, easy to assemble and use. They are widely used in aircraft, railway, power sector, water conservancy industry, communication, environment, geology, architecture, agriculture, forestry, real estate, outdoor sports, etc. We use solid-state lasers or diode lasers with 905nm/1550nm laser wavelength. The ranging distance is 5m-1800m, 180m-8000m, 50m-15000m, etc.

1. STC-DYA-00 series

STC-DYA-00 is highly compact, easy to assemble and use. STC-DYA-00A uses the 905nm diode laser and STC-DYA-00B uses the 1550nm diode laser. They have a long lifetime with low power consumption.

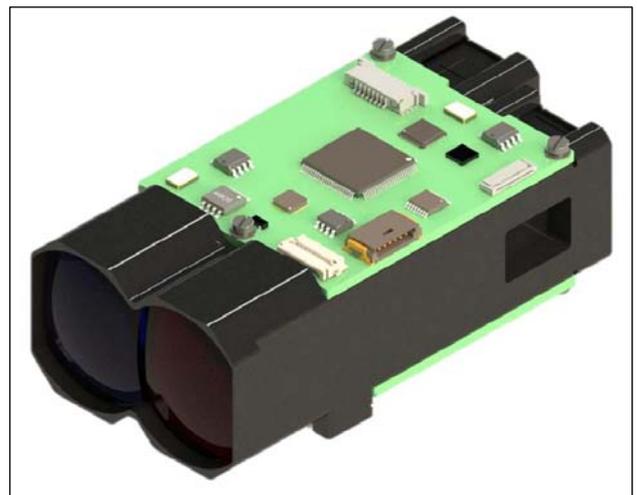


Model	STC-DYA-00A	STC-DYA-00B	Descriptions
Operating wavelength	905 nm	1550 nm	/
Range	5m~1800 m	30m~3000 m	See Note
Precision	±0.5m	±2m	Depend on Range
Frequency	1~10Hz	1~5Hz	/
Accuracy rate	≥98%	≥98%	/
Divergence angle	1.0 mrad	1.2 mrad	/
Aperture diameter	24mm	21mm	/
Communication interface	UART	UART	Optional: RS232/RS422
Input voltage	3.3V DC	3.3V DC	/
Power consumption	≤0.3W	≤3W	/
Standby power	≤0.15W	≤0.5W	/
Dimensions	50mmx50mmx26mm	60mmx45mmx25mm	
Weight, all components	≤50g	≤65g	
Heat dissipation method	Natural heat dissipation	/	/

2. STC-DYA-01(C)

STC-DYA-01(C) is highly compact, eye safe, easy to assemble and use. It uses the 1550nm diode laser and has a long lifetime with low power consumption.

Operating wavelength: 1550nm
 Range: 30m~4000m
 Precision: ±2m (depending on range)
 Frequency: 1~5Hz
 Accuracy rate: ≥98%
 Divergence angle: 1.2mrad
 Aperture diameter: 27mm
 Communication interface: RS232 (optional: RS422)
 Input voltage: 12V
 Power consumption: <3.5W
 Standby power: <0.35W
 Size: 92mmx50mmx34mm
 Weight: ≤120g
 Heat dissipation method: natural heat dissipation



3. STC-DYA-02(C)

STC-DYA-02(C) is highly compact, eye safe, easy to assemble and use. It uses the 1550nm diode laser and has a long lifetime with low power consumption.

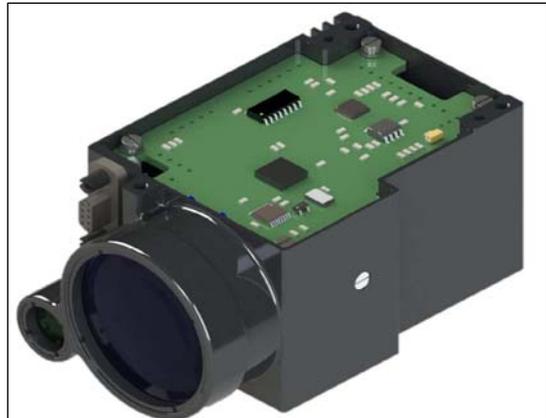
Operating wavelength: 1550nm
 Range: 30m~5000m
 Precision: $\pm 2m$ (depending on range)
 Frequency: 1~5Hz
 Accuracy rate: $\geq 98\%$
 Divergence angle: 1.0mrad
 Aperture diameter: 32mm
 Communication interface: RS232 (optional: RS422)
 Input voltage: 12V
 Power consumption: $< 3.5W$
 Standby power: $< 0.35W$
 Size: 99mm \times 62mm \times 45mm
 Weight: $\leq 170g$
 Heat dissipation method: natural heat dissipation



4. STC-DYC-01A

STC-DYC-01A is highly compact, eye safe, easy to assemble and use. It uses the solid-state laser and has a long lifetime with low power consumption.

Operating wavelength: 1535nm
 Range: 50m~8000m
 Precision: $\pm 0.5m$ (depending on range)
 Frequency: 1~5Hz
 Accuracy rate: $\geq 99\%$
 Divergence angle: 0.6mrad
 Aperture diameter: 33mm
 Communication interface: RS422
 Input voltage: 28V (optional: 12V)
 Power consumption: $\leq 4W$
 Standby power: $\leq 4W$
 Size: 86mm \times 51mm \times 40mm or customizable
 Weight: $\leq 200g$ or customizable
 Heat dissipation method: natural heat dissipation



5. STC-DYC-01B(1/2/3)

STC-DYC-01B is highly compact, eye safe, easy to assemble and use. It uses the solid-state laser and has a long lifetime with low power consumption.

Model	STC-DYC-01B1	STC-DYC-01B2	STC-DYC-01B3	Remark
Operating wavelength	1535nm	1535nm	1535nm	
Range	50m~10000m	50m~12000m	50m~14000m	
Precision	$\pm 1m$	$\pm 2m$	$\pm 2m$	Depend on Range
Frequency	1~5Hz	1~5Hz	1~5Hz	
Accuracy rate	$\geq 99\%$	$\geq 99\%$	$\geq 99\%$	
Divergence angle	0.8mrad	0.9mrad	0.6mrad	
Aperture diameter	48mm	48mm	48mm	
Communication interface	RS422	RS422	RS422	
Input voltage	28V	28V	28V	Optional: 12V

Power consumption	≤4W	≤4.2W	≤5W	
Standby power	≤4W	≤4.2W	≤5W	
Size	108mmx69mmx56mm	108mmx69mmx56mm	108mmx69mmx56mm	Customizable
Weight, all components	≤300g	≤300g	≤300g	Customizable
Heat dissipation method	Natural heat dissipation	Natural heat dissipation	Natural heat dissipation	

6. STC-DYC-01C(1/2/3)

STC-DYC-01C is highly compact, eye safe, easy to assemble and use. It uses the solid-state laser and has a long lifetime with low power consumption.



Model	STC-DYC-01C1	STC-DYC-01C2	STC-DYC-01C3	
Operating wavelength	1535nm	1535nm	1535nm	
Range	50m~11000m	50m~13000m	50m~15000m	
Precision	±2m	±2m	±3m	Depend on Range
Frequency	1~5Hz	1~5Hz	1~5Hz	
Accuracy rate	≥99%	≥99%	≥99%	
Divergence angle	0.8mrad	0.9mrad	0.6mrad	
Aperture diameter	65mm	65mm	65mm	
Communication interface	RS422	RS422	RS422	
Input voltage	28V	28V	28V	Optional: 12V
Power consumption	≤4W	≤4.2W	≤5W	
Standby power	≤4W	≤4.2W	≤5W	
Size	120mmx83mmx75mm	120mmx83mmx75mm	120mmx83mmx75mm	Customizable
Weight	≤450g	≤450g	≤450g	Customizable
Heat dissipation method	Natural heat dissipation	Natural heat dissipation	Natural heat dissipation	

STJ Series Laser Rangefinders

1. Diode Laser Rangefinder OEM Modules

The diode laser rangefinder module has the characteristics of small size, light weight, low power consumption, high performance, and easy integration. It is widely integrated in various equipment and optoelectronic systems.



- Semiconductor eye-safe laser.
- Accurate measurement and good repeatability.
- Small size and light weight.
- High reliability.

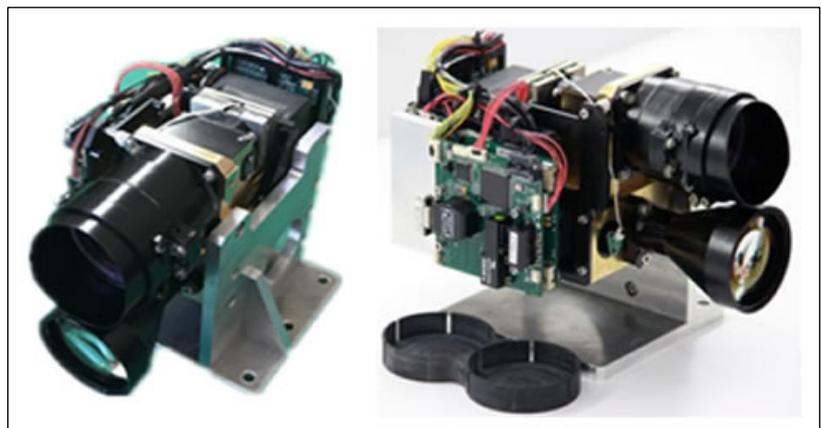
Technical specifications

Part number	STJ-RFS-032	STJ-RFS-028	STJ-RFS-6558
Wavelength	Eye-safe laser	Eye-safe laser	Eye-safe laser
Maximum range	Vehicle: 2km Human: 1km	Vehicle: 4.5km Big target: 8km	Vehicle: 4km Human: 2km
Minimum range	50m	100m	100m
Ranging accuracy	±5m	±5m	±5m
Repeat frequency	≥0.3Hz	≥0.3Hz	≥0.3Hz
Accurate rate	≥95%	≥95%	≥95%
Ranging logic	With the first and last target output function	With the first and last target output function	With the first and last target output function
Size(L×W×H)	≤65×45×30mm	≤120×100×52mm	≤110×100×50mm
Weight	≤60g	≤350g	≤350g
Operating temperature	-40℃~+60℃	-40℃~+60℃	-40℃~+60℃
Storage temperature	-55℃~+70℃	-55℃~+70℃	-55℃~+70℃

2. High-frequency Laser Rangefinder OEM Modules

STJ-RFS-376 high-frequency laser ranging module uses diode pumped laser as the light source, which can achieve high repetition frequency laser output, used to accurately and reliably measure the distance.

The main application areas include: shipboard, airborne, vehicle-mounted, shore-based photoelectric fire control system, photoelectric reconnaissance system, photoelectric monitoring system, photoelectric measurement system.



- Semiconductor pumped eye-safe laser.
- Repetition frequency can reach 20Hz.
- Long range and high reliability.

Technical Specifications

Part number	STJ-RFS-376
Wavelength	1.57 μ m
Maximum range	300m~20km (large targets under good weather conditions) 15km for 3*5m target
Ranging accuracy	\pm 5m
Repeat frequency	1~20Hz 1Hz working mode: continuous operation. 5Hz working mode: continuous working for 10 minutes, cooling for 1 minute. 20Hz working mode: continuous working for 1 minute and cooling for 1 minute.
Size	\leq 230 \times 150 \times 130mm
Weight	\leq 2.0Kg
Operating temperature	-40 $^{\circ}$ C~+60 $^{\circ}$ C
Highlight	High repetition frequency, long working distance, high measurement accuracy, high reliability and strong anti-interference ability
Application	Photoelectric reconnaissance system, photoelectric monitoring system, photoelectric measuring system

3. Erbium Glass Laser Ranging OEM Modules

STJ-RFS-6271 series erbium glass laser ranging modules use an erbium-doped glass laser as a light source, which can achieve a low-gain laser output and is used to accurately measure the target. They are mainly used for distance measurement of medium and long-range targets in the applications areas such as photoelectric reconnaissance system, photoelectric surveillance system.

- Eye-safe laser.
- Small size, light weight, high accuracy, high reliability and strong anti-interference ability



Technical Specifications

Part number	STJ-RFS-6271-20	STJ-RFS-6271-30	STJ-RFS-6271-40
Wavelength	1.54 μ m	1.54 μ m	1.54 μ m
Maximum range	\geq 12km	\geq 14km	\geq 16km
Ranging accuracy	\pm 2m	\pm 2m	\pm 2m
Repeat frequency	\geq 0.5Hz	\geq 0.5Hz	\geq 0.5Hz
Size	\leq 100 \times 50 \times 45mm	\leq 100 \times 61 \times 48mm	\leq 112 \times 72 \times 56mm
Weight	\leq 135g	\leq 160g	\leq 200g
Operating temperature	-40 $^{\circ}$ C~+60 $^{\circ}$ C		

4. Fiber Laser Rangefinder OEM Modules

STJ-JIR-603x series fiber laser ranging modules use rare earth-doped glass fiber as the gain medium to output eye-safe laser, which is small in size, light in weight, high in reliability and easy for system integration. Mainly used in photoelectric reconnaissance, photoelectric fire control, photoelectric monitoring, photoelectric measurement and other fields.

- Eye-safe laser.
- Small size and light weight.
- Fast heat dissipation and low loss.
- Strong environmental adaptability.



	STJ-RFS-6030A	STJ-RFS-6030B	STJ-RFS-6031	STJ-RFS-6032
Wavelength	1550±20nm	1550±20nm	1550±20nm	1550±20nm
Minimum range	50m	50m	50m	50m
Maximum range	≥15km (Ship: 20×70m)	≥3km (UAV: 0.3×0.3m)	≥8km (Vehicle: 2.3×2.3m)	≥6km (Vehicle: 2.3×2.3m)
Divergence angle	0.6mrad	0.3±0.1mrad	0.3±0.1mrad	0.3±0.1mrad
Repeat frequency	1Hz	5Hz	1Hz	1Hz
Ranging accuracy	±5m	±2m	±2m	±2m
Accurate rate	≥98%	≥98%	≥98%	≥98%
False alarm rate	≤2%	≤2%	≤2%	≤2%
Ranging logic	With the first and last target output function	With the first and last target output function	With the first and last target output function	With the first and last target output function
Size(L×W×H)	95×51×64mm	95×51×64mm	91×49×45mm	91×53×42mm
Weight	≤200g	≤200g	≤160g	≤150g
Operating temperature	-40℃~+60℃	-40℃~+60℃	-40℃~+60℃	-40℃~+60℃
Storage temperature	-50℃~+70℃	-50℃~+70℃	-50℃~+70℃	-50℃~+70℃

5. STJ-JIR-6244B Handheld Multifunctional Laser Rangefinder

STJ-JIR-6244B Multi-function Laser Rangefinder is mainly used for long distance observation and laser range finding, with the function of azimuth and pitch angle measurement, northing and GPS/Beidou positioning.



- Binocular observation
- Laser ranging
- Electronic compass
- GPS/Beidou positioning

- Data output

Device List

No.	Name	Qty	Remarks
1	Multi-functional laser range finder	1	1
2	Standby Battery	4	18650 rechargeable battery
3	Charger	1	
4	Communication cable	1	1

Technical Specifications:

(1) Laser Rangefinder

- Wavelength: 1570±20 nm
- Range capability: 100m~10km
- Ranging accuracy: ±5m
- Magnification: 6×
- Field of view: 6°

(2) Electronic compass

- Azimuth accuracy: 1°
- Elevation accuracy: 1°

(3) GPS: Locating accuracy: <10m

(4) Data output interface: RS422

(5) Power: Built-in four 18650 batteries or external DC 14.8V~16.8V power

(6) Working temperature: -40°C~60°C

(7) Size and Weight: ≤ 226mm(L)×206mm(W)×95mm(H), ≤ 1.8kg

6. STJ-JIR-6702 Portable Laser Irradiator

As a portable multi-functional laser target indication system, it can complete the target reconnaissance through TV, infrared, positioning, angle measurement, distance measurement and other multi-sensor, report the reconnaissance information through the information system, accept various control methods to start laser irradiation, send coded laser pulses to the target, and cooperate with semi-autonomous laser guidance weapons to complete the accurate target strike.

- Ranging and coding the target
- Visual observation of the target by uncooled infrared components or visible light (optional)
- It has external control function of upper computer.



Technical Specifications

(1) Laser ranging

- Working wavelength: 1.064 μm.

- Distance measurement capability: under the condition of 10km visibility, the distance of 4.6×2.3m tank is ≥ 5 km. The distance to large target (5×5m) is ≥ 8 km.

(2) Laser irradiation

- Working wavelength: 1.064 μ m.
- Repetition frequency: 1Hz-25Hz optional.
- Short period irradiation: one irradiation duration ≥ 17 s, interval ≤ 10 s, continuous 8 cycles.
- Long period irradiation: one irradiation duration ≥ 47 s, interval ≤ 40 s, two consecutive cycles.

(3) Uncooled infrared range

The maximum detection distance of 4.6×2.3m target is ≥ 4500 m, and the maximum recognition distance is ≥ 2500 m.

(4) Weight: laser irradiator ≤ 6.0 kg, thermal imager ≤ 2.0 kg.

(5) Boundary dimension

- Laser irradiator: ≤ 330 mm×300mm×130mm.
- Thermal imager: ≤ 340 mm×160mm×160mm.