

Long Range Compact Accurate Laser Ranging Module Sensor Rugged Environments, Security defense

Our Product Introduction

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Basic Information

- Place of Origin: SHENZHEN
- Brand Name: FOVA
- Certification: CE;FCC
- Model Number: YZT-CJ -0610A-1
- Minimum Order Quantity: 10
- Packaging Details: 27X22X17cm
- Delivery Time: 7-15days
- Payment Terms: T/T
- Supply Ability: 10000PCS/Month

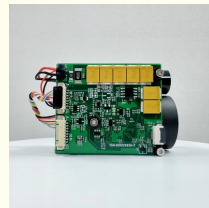
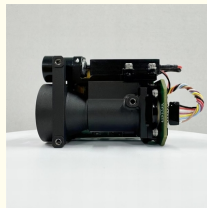
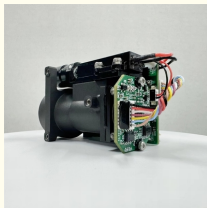
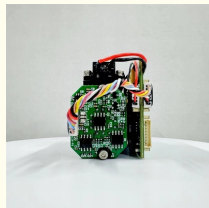


Product Specification

- Output Interface: RS-232, RS-422, USB
- Resolution: Sub-millimeter
- Pulse Rate: Up To 10,000 Pulses Per Second
- Laser Class: Class 1M
- Output Power: Up To 1 Watt
- Pulse Energy: Up To 10 MJ
- Protection Class: IP65
- Mounting Options: Tripod Or Fixed Mount
- Warranty Years: 1 Year
- Battery Life: Up To 10,000 Measurements
- Power Supply: AC Or DC
- Average Power Consumption: ≤2w
- Accuracy: Within Millimeter Level
- Feature: Small Size & Light Weight



More Images



Product Description

1535nm Laser Rangefinder Module, Compact and Accurate
Laser Ranging Module for Rugged Environments,

YZT-CJ -0610A Laser Range Finder Module

Technical Specification

Product Description

Small size and lightweight
Class I human eye safety standards
Stable performance and easy-to-use
Provide customization service
Distance measurement for vehicle (2.3*2.3m) over 4km
Developed based on 1535nm Er: Glass Laser

General

YZT-CJ-0610A laser ranging module is the eye safety laser ranging module in the photoelectric system, which can detect the target distance and transmit the measured distance to the host computer through serial communication.

Structure composition and main function index

The YZT-CJ-0610A laser ranging module consists of a laser, a transmitting optical system, a receiving optical system and a control circuit. The

Our Product Introduction

main performance is as follows:

2.1 Operating range

Visibility under visible conditions is not less than 10km, diffuse reflectance ≥ 0.3 , humidity $\leq 80\%$, the vehicle (2.3m \times 2.3m target) ranging distance ≥ 6 km.

2.2 Features

The main functions of the laser ranging module are:

- single ranging and continuous ranging;
- Range strobe, front and rear target indication;
- Self-inspection function.

2.3 Performance

Wavelength: 1535nm \pm 5nm;

Laser divergence Angle: ≤ 0.5 mrad;

Continuous ranging frequency: 1~10Hz adjustable;

Ranging accuracy: $\leq \pm 2$ m (RMS);

Accuracy: $\geq 98\%$;

Minimum measuring range: ≤ 30 m;

Ranging resolution: ≤ 30 m (multi-target);

Power supply voltage: DC9V ~ 16V (can be customized);

Weight: ≤ 70 g;

Power: average power consumption ≤ 1.5 W (1Hz operation), peak power consumption ≤ 5 W;

Size: ≤ 72 mm \times 45mm \times 35mm;

Working temperature: -40°C ~ +60°C;

Storage temperature: -50°C ~ +70°C;

2.4 Interface

Communication interface: RS422, 115200bps

Electrical interface: The interface model is Molex connector 51021-0800. The interface definition is described in the following table.

8P socket wiring definition			
No.	Definition	Wire color	Remarks
1	RS422 RX+	Brown	RS422 receive +
2	RS422 RX-	Blue	RS422 receive -
3	RS422 TX-	Yellow	RS422 send -
4	RS422 TX+	Purple	RS422 send +
5	GND	White	Communication interface
6	+12V	Red	Power supply
7	GND	Black	Power supply earthing
8	Reserved	Empty	Reserved

2.5 Installation dimension

3. Precautions for use

The laser emitted by the rangefinder is 1535nm for human eye safety laser, although it is a human eye safety wavelength, but it is recommended not to look directly at the laser;

When adjusting the parallelism of the optical axis, the receiving lens must be blocked, otherwise the detector will be permanently damaged due to excessive echo;

The measuring module is non-airtight, and must ensure that the relative humidity of the use environment is less than 80%, and ensure that the use of the environment is clean and sanitary, so as not to damage the laser;

The range measurement of the rangefinder is related to the atmospheric visibility and the nature of the target, and the range measurement will be reduced in the case of fog, rain and wind sand. Green leaf clusters, white walls, exposed limestone and other targets have better reflectivity, which can increase the measurement range. In addition, when the Angle of the target to the laser beam increases, the measurement range will be reduced.

It is strictly forbidden to emit laser to strong reflection targets such as glass and white walls within 20 meters, so as to avoid too strong echo, resulting in damage to the APD detector;

Do not plug and unplug the cable in the energized state;

Ensure that the power supply polarity connection is correct, otherwise it will cause permanent damage to the equipment;



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