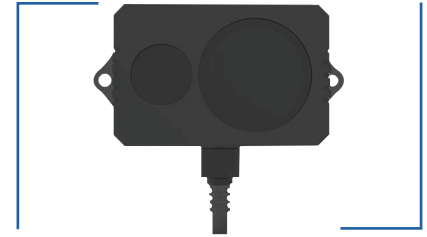


As a new generation of TF01-based single-point ranging LiDAR researched, developed and massively produced on the basis of rich experience, based on TOF (Time-of-Flight), TF02 boasts higher performance and can be used in a wider range of applications.



Main features of product

- The range up to 22 meters
- Ambient light resistance (Up to 100Klux)
- IP65 Protection
- Anticorrosive plastics

Main Applications

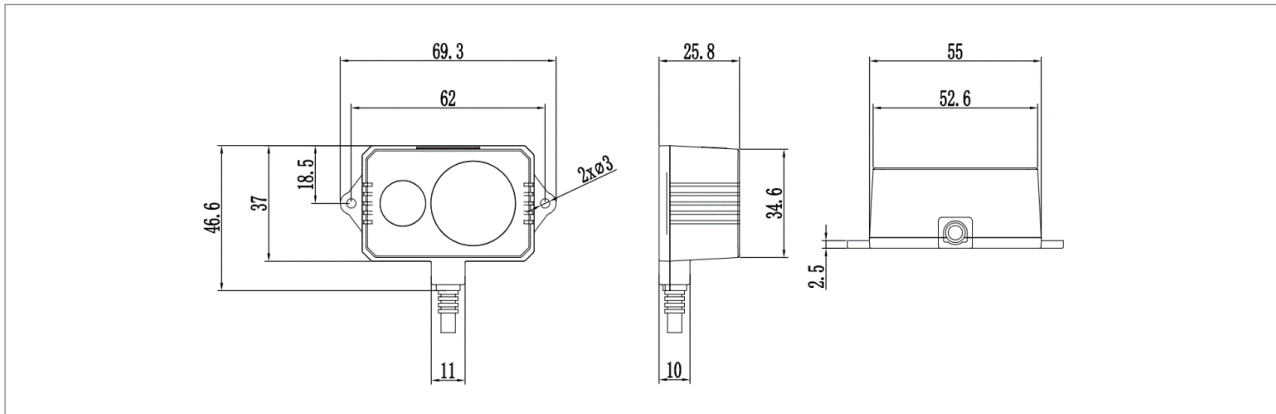
- Intelligent traffic
- Intelligent parking lots
- Material level monitoring
- UAV

■ Specification Parameters

Parameters name		value
Performance Parameters	Range	0.4~22m@90%reflectivity; 0.4~10m@10%reflectivity 0.4~15m@90%reflectivity (100Klux) 0.4~8m@10%reflectivity (100Klux)
	Accuracy ^①	±5cm (0.4~5m) , ±2% (5~22m)
	Resolution	1cm
	Output frame rate	100Hz
	Repeatability	1σ: <1cm (0.4~10m) , 1σ: <2cm (10~22m)
	Ambient light resistance	100Klux
	Working temperature	-10~60 C
	Protection Level	IP65
Optical parameters	Light source	LED
	Central wavelength	850nm
	FOV	3°
	Photobiological safety	Exemption Level (EN62471)
Electrical parameters	Supply voltage	DC 5V±0.5V
	Average current	≤400mA
	Power consumption	≤2W
	Peak current	1.6A
	Communication interface level	LVTTTL (3.3V)
	Communication interface	UART or CAN
Other Parameters	Dimensions	69mmx46mmx26mm(L*W*H)
	Weight	60g (with cables)
	Enclosure material	TPX+Aluminium
	Storage temperature	-20~80 C
	Cable length	80cm

Notes: ①Accuracy is measured in white object (90% reflectivity) at 25 C and will be somewhat different in case of different reflectivity or light sensitivity conditions or temperature.

Figure for product dimensions



TF02 dimensions (Left 1: front view, left 2: left view, left 3: bottom view) Unit: mm

Communication protocol and Interface

Serial port communication protocol

Protocol	UART
Baud rate	115200
Data bit	8
Stop bit	1
Parity check	none

CAN Communication Interface

Protocol	CAN
Baud rate	1M
ID	0x00090002
Frame format	Expansion frame

Note: More details of communication protocol and interface please refer to TF02 manual.

Configurable parameters

Configurable item	Description	Default
Setting trigger source	Setting internal trigger mode or external trigger mode	Internal trigger mode
Setting Data output cycle	Adjustable from 1Hz to 100Hz	100Hz
Setting serial port baud rate	Support serial port baud rate configuration: 9600, 14400, 19200, 115200, 256000	115200
Setting CAN baud rate	Support CAN baud rate configuration: 125K, 250K, 500K, 666K, 1M	1M

Note: More configurable items and related details please refer to TF02 manual.

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EN62471



Product Certification