

TOFSense-F2 PH Datasheet V1.0

TOFSense-F2 PH is a single-point laser rangefinder sensor based on TOF (Time of Flight) technology. The ranging range is $0.05 \text{m} \sim 40 \text{m}$; The distance resolution is 1mm; The data update frequency can reach up to 100Hz; The FOV(Field of View) is $1\sim2^{\circ}$; It supports UART, IIC interface, and I/O complementary level output; In UART mode, it supports active and query data output.



Typical Specifications			Applications
Weight		12.7 g	Robot Obstacle Avoidance Personnel Detection
Size ¹		31.0*24.1*16.6 mm	
Interface ²		UART	
		IIC	
		I/O	
Measure Frequency		100 Hz	
Range of Distance		0.05~40 m	
Distance Accuracy ³	STD	3 mm	
	RMSE	3 cm	
Wavelength ⁴		905 nm	Conveying Detection Hydraulic Level Detection
Resistant to Ambient Light		About 100K LUX Illumination	Drone Altitude Hold
FOV		1~2°	
Service Voltage		4.3~5.2 V	
Power		250 mW	
Working Temperature ⁵		-10~60 °C	
Storage Temperature		-30~60 °C	
Levels of Protection		IP68	

¹ Length * Width * Height, please refer to page 2 for detailed dimensions.

² The interface can serve as UART, IIC, and IO interfaces simultaneously, with a TTL signal line level of 3.3V. The default UART baud rate is 921600 bps.

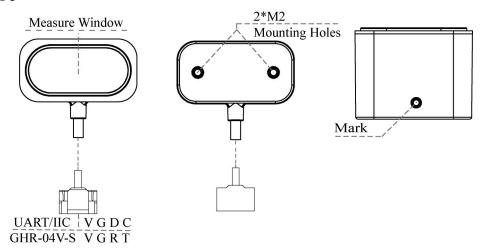
³ Detailed reference accuracy test report.

⁴ 750-830nm laser complies with the Class2 standard specified in IEC 60825-1:2014 3rd edition, and is currently under review for the 940nm and 905nm bands.

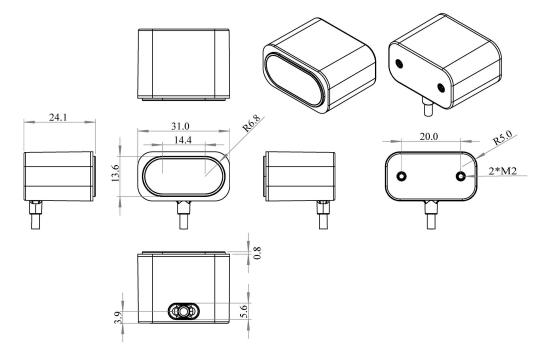
⁵ The data was obtained through actual environmental testing, and actual use should be based on the working environment.



Structure



Size Unit:mm



Note: The actual size may vary due to manufacturing process and measurement method. Please refer to the actual product.

More information

Company: Shenzhen Nooploop Technology Co.,Ltd

Address: A2-207, Peihong Building, No.1 Kehui Road, Yuehai Street, Nanshan District, Shenzhen

Email: sales@nooploop.com
Website: www.nooploop.com