

# TERABEE



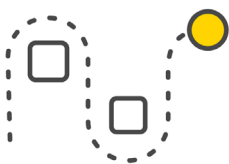
## TeraRanger Evo 3m

With its 10 cm to 3m range, fixed 100Hz update rate and greater accuracy, TeraRanger Evo 3m is perfectly suited to close-range distance sensing applications at higher speed. Applications include, presence and proximity detection, object detection/counting and robot navigation. All in a small and lightweight form-factor.

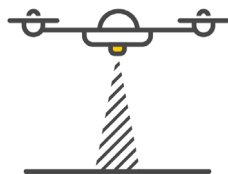
## Key features

- Infrared Time-of-Flight technology
- Optimized for close range measurements (start from 10 cm)
- Small and lightweight design (from 9 gr)
- Choose between USB, I2C and UART clip on interfaces
- Compatible with Arduino, Raspberry Pi, Pixhawk and ROS
- Operates in low light and complete darkness
- Product design optimized for OEM and easy integration

## Applications



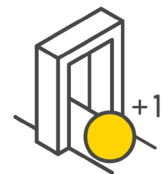
Robot collision avoidance



Precision landing for drones



Level monitoring (bins, waste, etc)



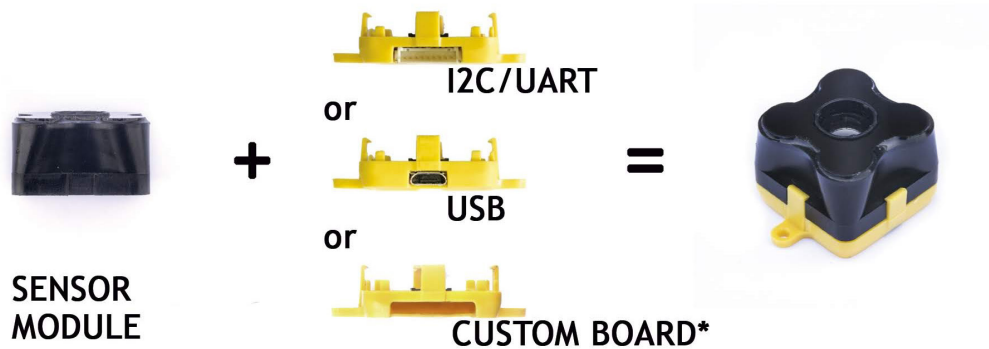
Presence detection

# Technical specifications

Product code	TR-EVO-3M
<b>Performance</b>	
Detection principle	Infrared Time-of-Flight
Range *	0.1m up to 3m
Update rate	Fixed at 100Hz
Output resolution	0.5cm
Accuracy	±2cm
Field of View	Approx. 2°
<b>Electronics</b>	
Supply voltage	5V DC +/-5%
Supply current (min-max)	70mA - 250mA
<b>Communication</b>	
Interfaces	USB 2.0 Micro-B
	UART, +3.3V level, 115200,8,N,1
	IC2, +3.3V level, 400kHz
Connectors	Single 9 pin Hirose DF13
	Micro USB
<b>Mechanical data</b>	
Dimensions	Approx. 29x29x22mm (sensor + backboard)
Weight	9 g (sensor) + 3 g (backboard)
Eye safety	Yes (CE certified)

\* Specifications are derived from tests in controlled conditions. For more information please see the [TeraRanger Evo 3m Test Results Report](#).

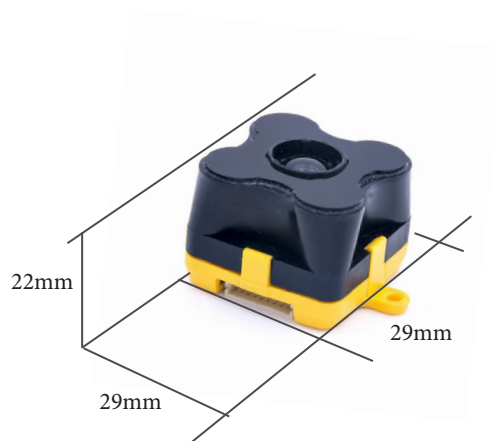
## Modular Evo Design



The sensor comprises two parts; an opto-electronic sensing device (black module, 9g) and a choice of interface backboard (yellow module, 3g). Simply clip your preferred interface board to the sensor. USB and I2C/UART backboards are available, and custom backboards can also be made to support specific applications. This two-part design alleviates the need to use adapters and converters.

Drivers for ROS (Robot Operating System) and popular drone flight controllers are also in development, or available, adding to the plug and play convenience of our Evo series sensors.

## Dimensions



**Have any questions? Contact us today!**