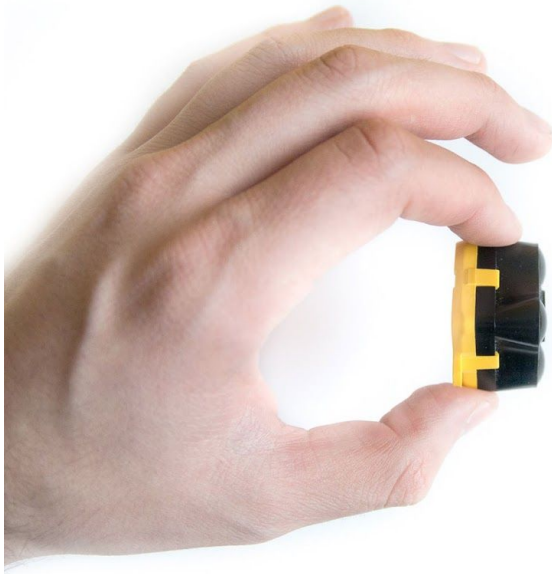


# TeraRanger Evo 600Hz

by TERABEE 

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- **Fast & Reliable**  
Fixed 600Hz update rate
- **2° Field of View**  
Obtain stable data stream
- **Plug and Play**
- **Small & Lightweight**  
From 9g
- **Option for Custom Interfaces**
- **ROS Ready**

React faster and detect objects with greater assurance thanks to a **FIXED** update rate of 600 readings per second! - Ideal for fast-moving robotics, smart city and industry 4.0 applications!

## Key Features:

- Fast and reliable - fixed update rate of 600Hz
- Seamless integration - Small and lightweight (from 9g)
- 2° Field of View - Measures the distance of an area
- Modular design - options for custom interfaces
- ROS ready and compatible with popular drone flight controllers
- Eye safe and CE certified

## Some of the many potential applications include:

- Robotic navigation
- Fast collision avoidance
- High-speed object detection and counting

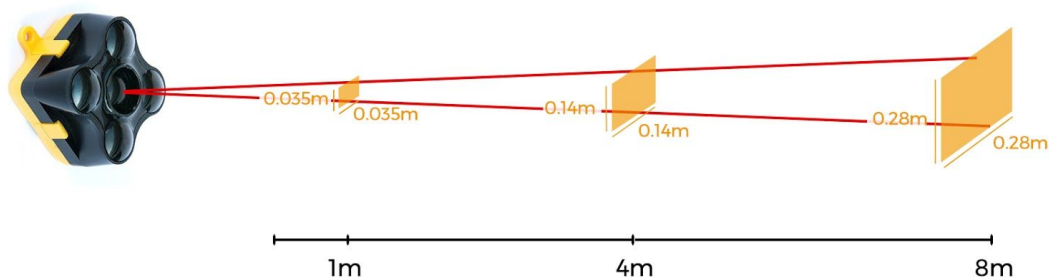
## Technical Specifications:

	<b>TeraRanger Evo 600Hz</b>
Principle:	Infrared Time-of-Flight (ToF)
Range:	*0.75m up to 8m
Update Rate:	Fixed at 600 readings per second
Output Resolution:	0.5cm
Accuracy:	±12cm
Field of view:	Approx. 2°
Supply voltage:	5V DC ±5%
Supply current (min-max):	90mA - 330mA
Interfaces (depending on chosen back-board):	USB 2.0 Micro-B
	UART, +3.3V level, 115200,8,N,1
	I2C, +3.3V level, 400kHz
Connectors:	Single 9 pin Hirose DF13
	Micro USB
Weight:	9g (sensor) + 3g (backboard)
Dimensions:	Approx. 29x29x22mm (sensor + backboard)
Eye safety:	Yes (CE certified)

*\*Please note: Maximum range will vary according to operating environment, surface reflectivity, direct sunlight and other variables.*

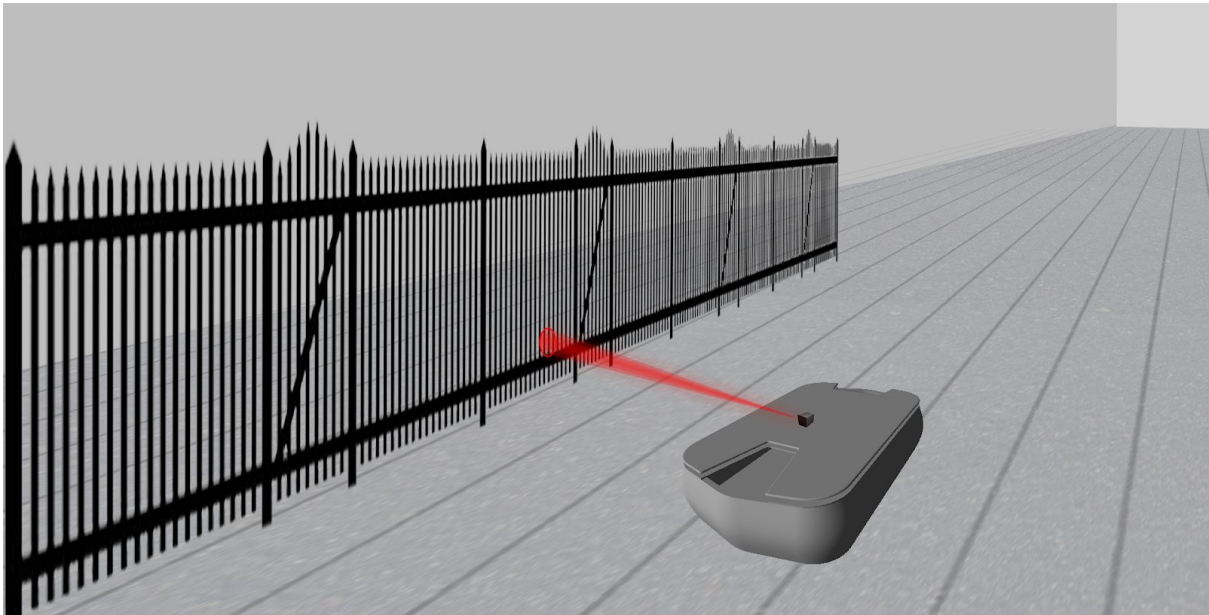
## Field of View advantages

### 2° Field of View



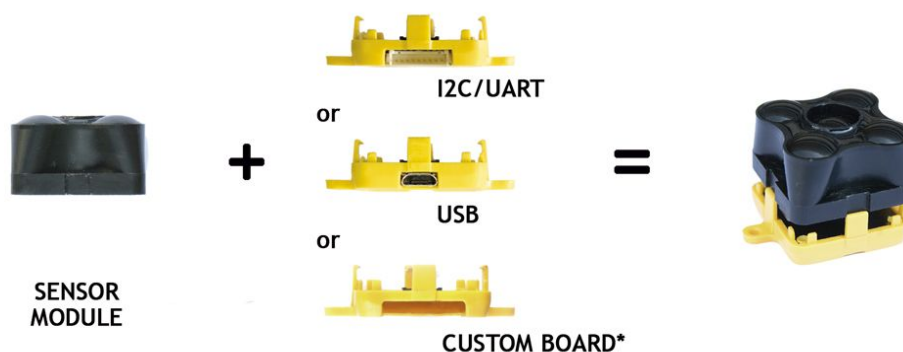
Instead of laser, TeraRanger Evo uses LED technology. One advantage of this is that it enables the sensor to have a “Field of View” so that, rather than measuring distance based on a very small point, the sensor measures over an area. For many applications this is a significant advantage and provides a more appropriate and stable datastream. Examples

include drone flight over vegetation, a robot navigating close to a picket fence, or irregular shaped objects being detected at high speed.



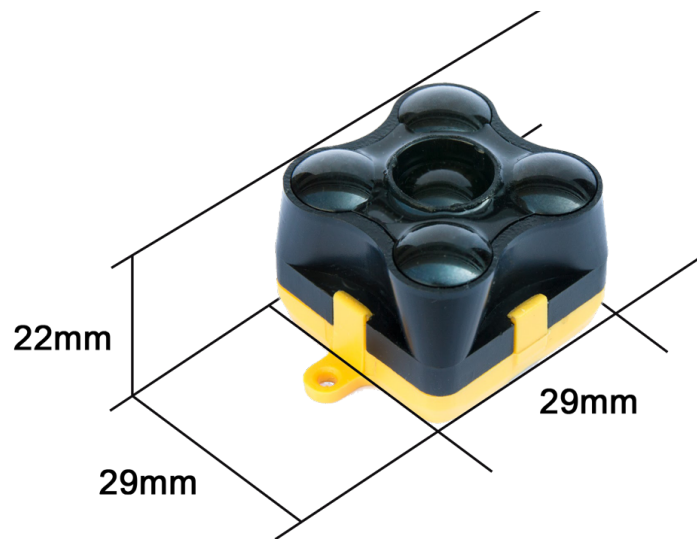
## Modular design

TeraRanger Evo consists of an opto-electronic sensing device (black module, 9g) and a choice of backboard (yellow module, 3g), which simply plugs in to provide communications and to manage different power supplies, without the need for adaptors, converters or complex wiring. You simply chose the backboard that best suits your application and communication protocol! USB and I2C/UART backboards are available, and **custom backboards** can be made to support specific applications.



\* WiFi, Bluetooth, LoRa/Sigfox, Ethernet, RS485, Profibus, CAN, etc on demand

## Dimensions



The TeraRanger Evo 600Hz can be purchased via our online store at:  
<http://www.teraranger.com/product/teraranger-evo/>