

# TeraRanger Evo 3m

by **TERABEE** 

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- **Optimized for close-range distance measurement**
- **Small and lightweight**  
from 9g
- **USB, I2C and UART interfaces**  
Other interfaces possible
- **Works with TeraRanger Hub Evo**  
for easy multi-sensor deployment
- **Eye-safe in all conditions**
- **ROS Ready & Pixhawk compatible**

With its 10cm to 3m range, fixed 100Hz update rate and greater accuracy, TeraRanger Evo 3m is perfectly suited to close-range distance and ranging, object detection and robot navigation, all in a small and lightweight form-factor!

## Key Features

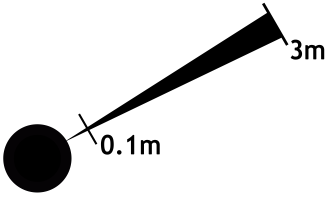


- Optimized for close-range distance measurement
- Small and lightweight (from 9g)
- USB, I2C and UART interfaces. Other interfaces possible
- Works with TeraRanger Hub Evo for easy multi-sensor deployment
- Eye-safe in all conditions
- ROS-ready and Pixhawk compatible

## Technical Specifications

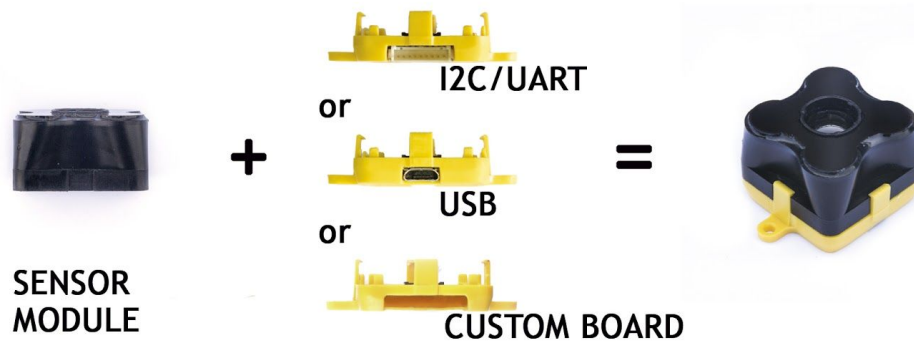
<b>TeraRanger Evo 3m</b>	
Principle:	Infrared Time-of-Flight (ToF)
Range:	0.1m up to 3m
Update Rate:	Fixed at 100Hz
Output Resolution:	0.5cm
Accuracy:	+/-2cm
Field of view:	Approx. 2°
Supply voltage:	5V DC +/-5%
Supply current (min-max):	70mA-250mA
Interfaces:	USB 2.0 Micro-B
	UART, +3.3V level, 115200,8,N,1.
	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 (IEC-62471 certified)

*Specifications are derived from tests in controlled conditions. For more information please see the "TeraRanger Evo 3m Test Results Report" available from the Evo 3m product page of the Terabee website.*

## Potential Applications

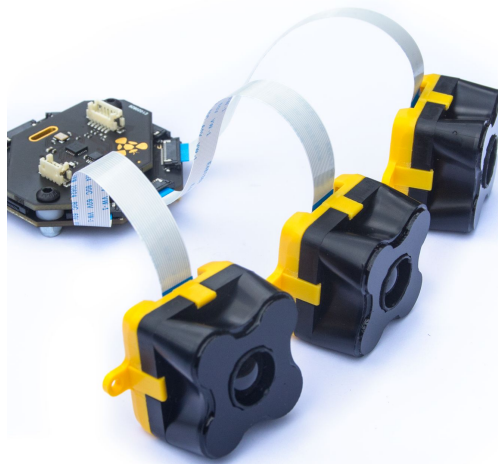
 <p>Close-range distance and ranging</p>	 <p>Scanning, mapping, navigation and collision avoidance</p>	 <p>Precision landing and robot positioning</p>
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## Modular Evo Design



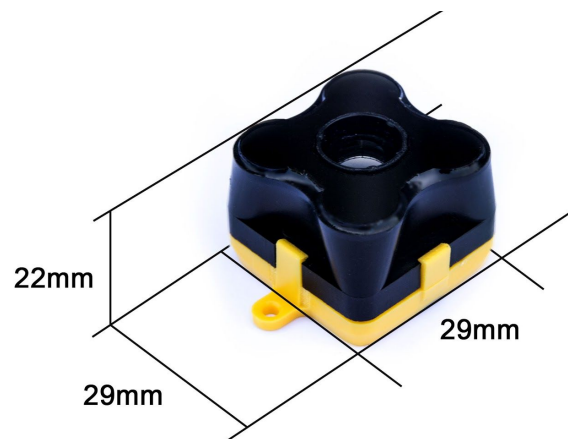
TeraRanger Evo consists of an opto-electronic sensing device (black module, 9g) and a choice of backboard (yellow module, 3g), which simply plugs in to provide communications and to manage different power supplies, without the need for adaptors, converters or complex wiring. You simply chose the backboard that best suits your application and communication protocol! USB and I2C/UART backboards are available, and **custom backboards** such as LoRa/Sigfox, Ethernet, RS485, Profibus, CAN, etc. can be made to support specific applications.

## Plug & Play Versatility and Scalability



Thanks to TeraRanger Hub Evo, you can prototype multi-sensor configurations in no time! Build custom sensor arrays, address specific application needs and avoid cross-talk between sensors. Want to know more? Visit the [TeraRanger Hub Evo page](#).

## Dimensions



The TeraRanger Evo 3m can be purchased via our online store at:  
<https://www.teraranger.com/product/teraranger-evo-3m/>