

TeraRanger Evo 64px

by TERABEE 



**The multi-pixel sensor of the TeraRanger Evo family!
Benefit from an 8x8 matrix of high-speed distance readings in a small
and lightweight form-factor!**

Key features

- 64 pixel 3D depth map
- Compact and lightweight design (from 12 grams)
- Capture fast-moving objects (up to 130 fps sampling rates)
- Start measuring from just 10 centimeters
- USB and UART interfaces. Other interfaces possible
- Immune to low light and darkness
- Eye-safe in all conditions
- ROS ready

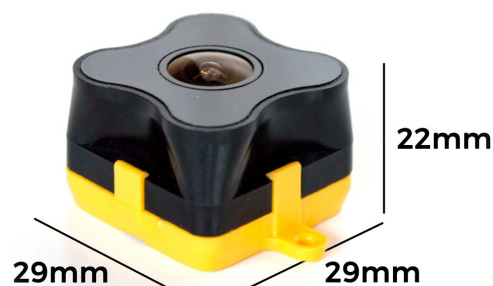


Technical Specifications

TeraRanger Evo 64px		
Principle:	Infrared Time-of-Flight (ToF)	
Resolution:	64 pixels (8x8 matrix)	
Operating mode:	Close-range	Fast
Range:	*0.1m up to 5m	*0.5m up to 5m
Update rate:	*up to 80 fps	*up to 130 fps
Output resolution:	0.5cm	
Accuracy:	+/- 5cm 0.1m to 1m +/- 10cm 1m to 3m +/- 15cm > 3m+	+/- 10cm < 3m +/- 15cm > 3m
Field of view:	15°	
Supply voltage:	5V DC ±5%	
Supply current (min-max):	80mA - 250mA	
Interfaces:	USB 2.0 Micro-B	
	UART, +3.3V level, 3 Mbaud	
Connectors:	Single 9 pin Hirose DF13 (UART Backboard)	
	Micro USB (USB Backboard)	
Weight:	12g (sensor) + 3g (backboard)	
Dimensions:	Approx. 29x29x22mm (sensor + backboard)	
Eye safety:	Yes (IEC 62471:2006 certified)	

* Please note maximum range, frame rate and accuracy will vary according to operating environment, surface reflectivity, temperature, direct sunlight and other variables.

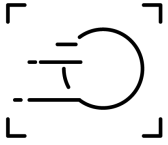
Compact design



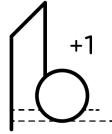
The TeraRanger Evo 64px can be purchased via our online store

<https://www.terabee.com/portfolio-item/teraranger-evo-64px-multi-pixel-sensor/>

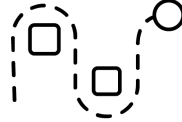
Applications



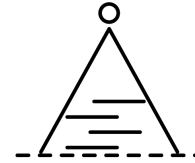
Motion tracking



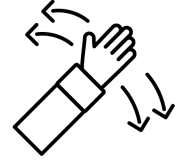
Monitor and count



Detect & avoid obstacles

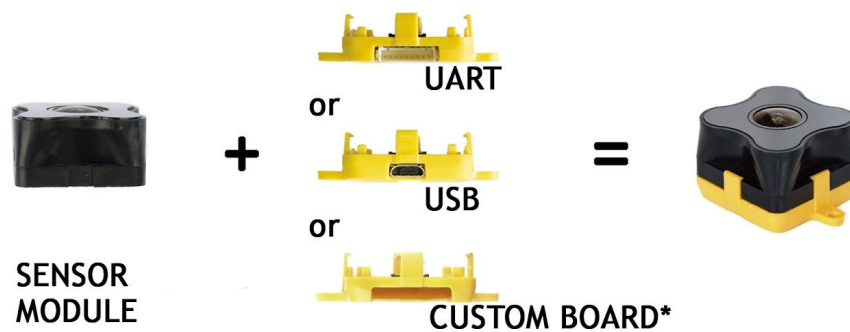


Multi-point level sensing



Gesture recognition

Modular Evo Design



TeraRanger Evo 64px consists of an optoelectronic sensing device (black module, 12g) and a choice of backboard (yellow module, 3g), which simply plugs-in to provide the sensor with a communication link and power management capabilities, without the need for adaptors, converters or complex wiring. You simply choose the backboard that best suits your application and communication protocol! USB and UART backboards are available.

***Custom backboards** such as LoRa/Sigfox, Ethernet, RS485, Profibus, CAN, etc. can be made to support mass production needs.

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