TeraRanger Multiflex



TeraRanger Multiflex is the modular solution for short range (<2m) distance sensing applications. Connect up to eight plug and play sensors on one flexible bus to create custom configurations and to place sensors where needed. An array of calibrated distances in millimetres is streamed from the Multiflex Hub. It's the ideal - and higher performance - alternative to ultrasound for shorter-range distance sensing, delivered as a convenient and easy to use kit.

A user manual is available on the TeraRanger website, and a ROS (Robot Operating System) node will help you get up and running quickly.

TeraRanger Multiflex comes in 2 versions:

Multiflex



Multiflex PCB





Technical Specifications:

	Multiflex	Multiflex PCB
Principle:	Infrared laser Time-of-Flight (ToF)	
Range:	Up to 1.10m	Up to 2.00m
Update rate:	Up to 50Hz*	Up to 30Hz*
Range resolution:	1mm	1mm
Accuracy:	± 6cm	±3cm
Field of view:	Approx. 20°	
Supply voltage:	5V DC	
Supply current:	50mA (typical conditions with 8 sensors connected)	
Interfaces:	USB 2.0 Micro-B	
	UART, +3.3V level, 115200 baud	
	I2C, +3.3V level, 400kHz	
Connectors:	7 pin DF13	
	Micro USB (50cm cable provided)	
Weight:	Each sensor unit: Approx. 2g, Multiflex Hub: 5 g, Total kit: Approx. 20g	
Sensors and Hub protection covers:	Yes	No
Eye safety:	Class 1 laser device compliant with standard IEC 60825-1:2014-3rd ed.	

Notes: *Output from the Hub with a single sensor connected. When more sensors are connected, divide this number by the total number of sensors. All tests conducted against a white diffuse reflector at nominal voltage (5V) and typical temperature (23 degrees C) with the complete Field of View covered.

In the box:

Multiflex

- 8 sensors with covers
- Multiflex Hub and case
- 8 Flat Flex cables (10cm)
- Micro USB cable (50cm)



- 8 sensors without covers
- Multiflex Hub
- 8 Flat Flex cables (10cm)
- Micro USB cable (50cm)





The TeraRanger Multiflex can be purchased via our online store at: <u>http://www.teraranger.com/product/teraranger-multiflex/</u>

