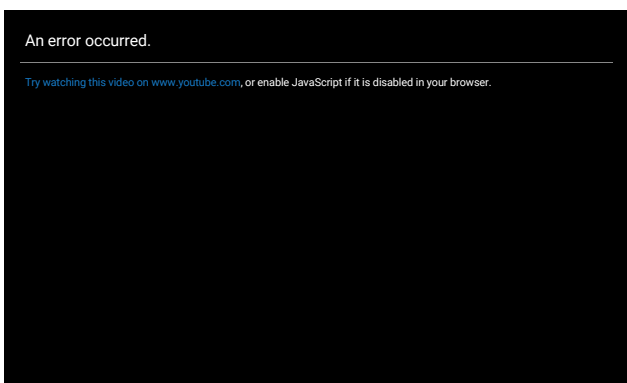


**Description** Documents Learn Reviews FAQs



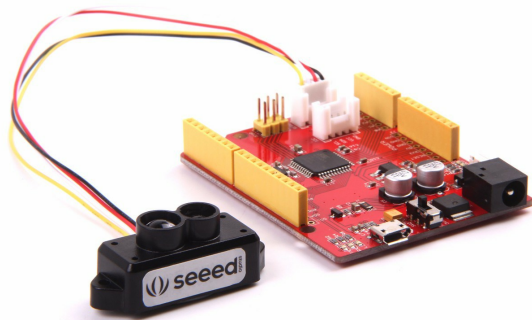
The TF Mini LiDAR is based on ToF (Time of Flight) principle and integrated with unique optical and electrical designs, so as to achieve stable, precise, high sensitivity and high-speed distance detection.

ToF is the abbreviation of Time of Flight technology, and its operating principle is as follows: a modulated near-infrared light is sent from the sensor and reflected by an object; the distance to the object to be shot can be converted with the sensor by calculating the time difference or phase difference between the light sending and the light reflection, so as to produce the depth information.

Applications:

- Drone altitude holding and terrain following
- Machine control and safety sensor
- Robot distance detection

If you are using [Seeeduino Lite](#) then just put it straight into the Grove Serial Interfaces.



1.1 TF mini optical simulation of the optical path:



1.2 Measurement range schematic diagram:

**Seedstudio Grove - TF Mini LiDAR**

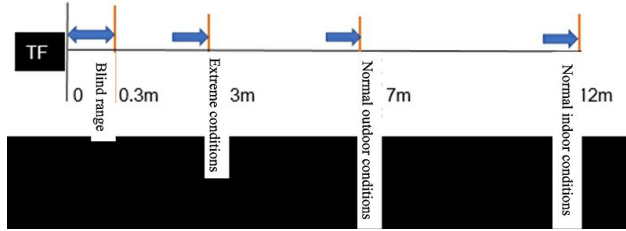
SKU 114991434

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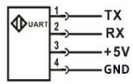
LiDar RPLiDAR rplidar lidar

- 1 + US Warehouse

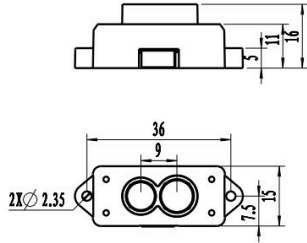
[Add to Cart](#)



### 1.3 Line sequence description:



### 1.4 Product Size Specifications



#### Technical details

Dimensions	42mm x15mm x16mm
Weight	G.W 4.7g
Battery	Exclude
Operating range	0.3m-12m
Maximum operating range at 10% reflectivity	5m
Average power consumption	0.6W
Applicable voltage range	4.5V-6V
Acceptance angle	2.3°
Minimum resolution ratio	1cm
Frequency	100Hz
Accuracy	1% (less than 6m), 2% (6m-12m)
Distance detection unit	cm
Laser Wavelength	850nm
Operating temperature	-20°C-60°C
Light sensitivity	70,000lux
Communication interface	UART
Laser Safety Class	FDA Class I
LED peak current	800ma
Electromagnetic Compatibility(EMC)	EN 55032 Class B

#### Part List

TF Mini LiDar	1
Grove Cable	1

#### ECCN/HTS

ECCN	ERA99
HSCODE	9015100000
USHSCODE	9015900130
UPC	841454121336

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