

# ToF(FLY-PLY) Module



ToF is an abbreviation of Time of Flight, and some translations call it flight time. The basic principle is to emit a continuous infrared light pulse (light source: VCSEL) of a specific wavelength to the target, receive the optical signal (Camera) returned by the object to be measured through a specific sensor, and calculate the flight time or phase difference of the light to get the object 3D depth information. The brightness image and depth information of the TOF camera can be connected through the algorithm to complete the detection quickly and accurately.

## Specifications (T=25°C)

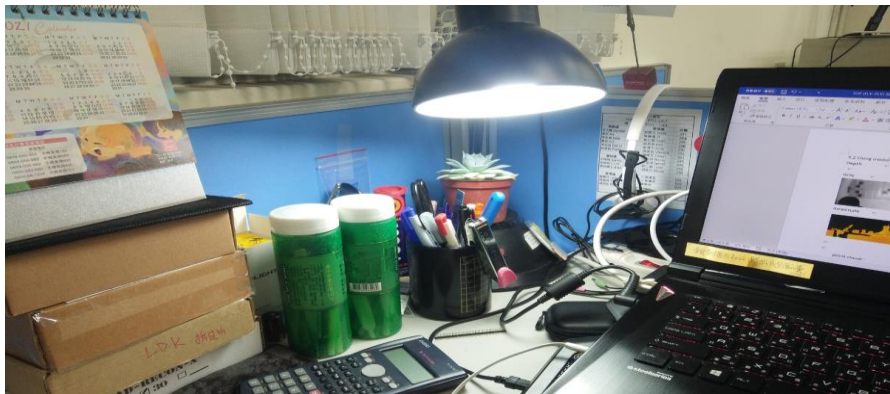
Items	
Pixel resolution	160x60 pix
Optical format	1/6 inch
F-number	F 1.3
Field of view(FOV)	Diagonal/Horizontal/Vertical: common angle:114°/107°/41°
Illuminator	VCSELx2: 940nm
Voltage	12V
Current	2A
Interface & Protocol	USB 2.0/3.0 & VCP
Depth data frame rate	20 FPS
Working range	0.3 — 5m
Range tolerance	+/-5cm~+/-15cm
HDR mode support	Depth / Grayscale / 3D Point cloud/Amplitude
Housing Material	Yes
Working temperature	-10℃ — 65℃
Storage temperature	-15℃ — 85℃
Dimension / Weights	59x26x24mm / 60g
SDK supported	Win 7/10, Ubuntu ROS

### Module indicator

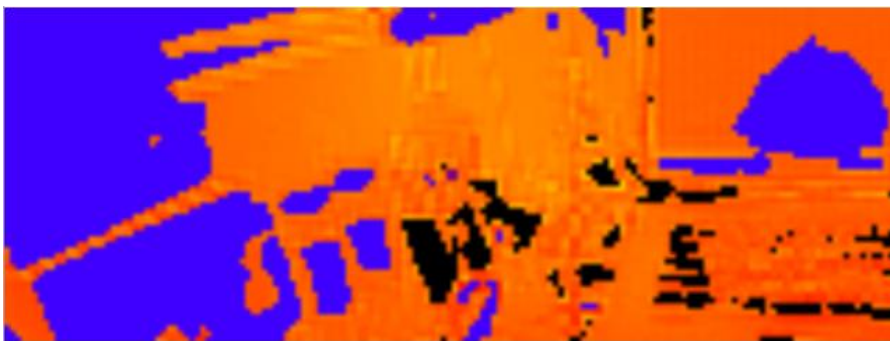
1. Launch GUI.exe
2. Connect USB cable of ToF module to PC(NB)
3. Press "getinfo" icon of GUI window
4. Press "Stare"
5. Choice "Frame mode" for user needed
6. Vary the integration value for clearer image.
7. Tick "Horizontal / Vertical " to Flip image base on actual scenes
8. Tick "show value" to get the distance of the point on the image when "Depth"
9. Tick on the scope of image to get distance of point you interested

### Using mode

#### Actual scene



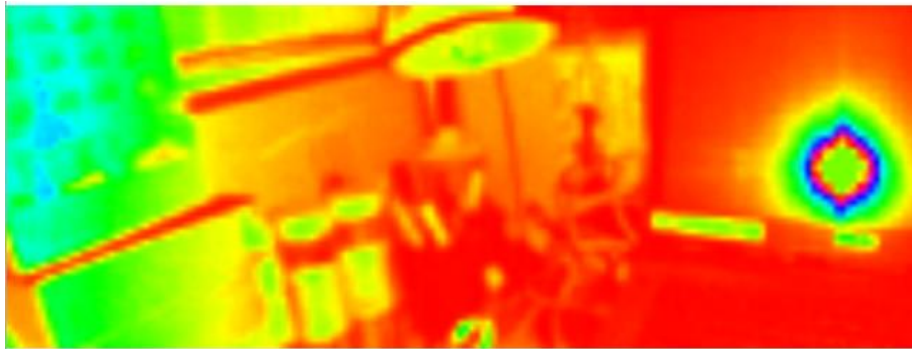
#### Deep



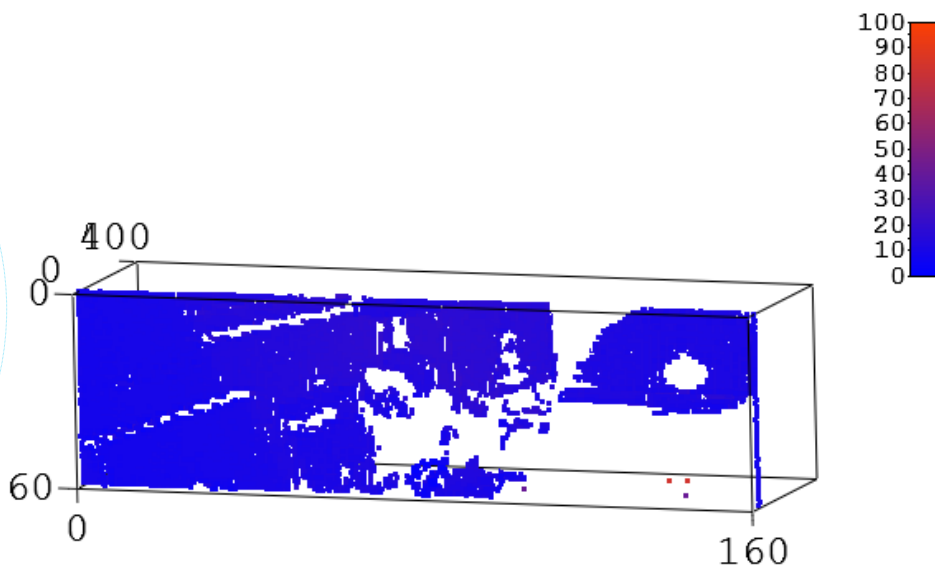
Gray



Amplitude



Point cloud



### Applications

