

DepthEye Turbo

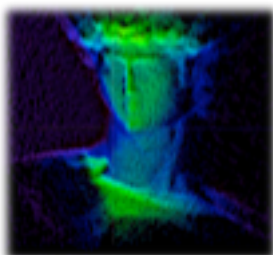
VGA Time-Of-Flight(ToF) Camera with Sony DepthSense™



Gray Image



Depth Map



PointCloud

Model	DepthEye Turbo
Sensor	Sony IMX556PLR CMOS
Resolution/FPS	0.3MP 640 x 480 px/ Max 30 FPS
Dimension &Weight	L:57 x W:57 x H:51 mm / 305 g
Accuracy	Less than 5mm (<=1.5m)
Precision	Standard deviation less than 2mm at 1m
Working Range	Near Mode: 0.7m to 1.5m Far Mode: 0.7m to 6m
FOV	H31.2° x V23.8° / H100° x V77° (Option)
Data Interface	USB 3.1 Gen1 /Type C
Power Consumption	Near Mode :5V/ 1A (Peak) /0.6A(Average) Far Mode : 12V/ 1A (Peak) /0.5A(Average)
Illumination	4 x VCSEL laser diodes @ 850nm
Operating Temperature	-10°C – 60°C
SDK Platform	Windows/Linux/Mac
SDK language support	C++/Python/ C++ Wrappers for ROS

Depth accuracy

Absolute accuracy

> 0.6 – 1.0 m	± 5 mm	<ul style="list-style-type: none"> Maximum deviation. Reflectivity of target 65%. Ambient temperature 20°C Defined as mean value of deviations for 4*4 pixels around the center point Power consumption (2W) 5fps, 100% integration
>1.0 – 1.5 m	± 5 mm	
>1.5 – 2.5 m	± 5 mm – ±15 mm	
>2.5 – 3.5 m	±15 mm – ±30 mm	
>3.5 – 4.5m	±30 mm – ±45 mm	
>4.5 – 6m	±45 mm – ±50 mm	

Repeatability

>0.6 – 1.0 m	1.0 mm – 1.5 mm	<ul style="list-style-type: none"> Maximum standard deviation. Reflectivity of target 65 %. Ambient temperature 20°C. Defined as mean value of the single pixel standard deviations, within the region of interest.
>1.0 – 1.5 m	1.5 mm – 2.0 mm	
>1.5 – 2.5 m	2.0 mm – 4.5 mm	
>2.5 – 3.5 m	4.5 mm – 6.0 mm	
>3.5 – 4.5m	6.0 mm – 10 mm	
>4.5 – 6m	10 mm – 18 mm	

Support

SDK & Document	https://github.com/pointcloudAI/libPointCloud
Support Email	dev@pointcloud.ai
Large FOV Model	The working range of the FOV H100° x V77° module is 0.3 m to 2.5M. It needs to be booked in advance.