

TOPPAN

senSPure™ Series

3D ToF Camera C11U



C11U equipped with TOPPAN's 3D ToF sensor TPHT4030 and a depth calculation engine optimized for our sensor, is used in various 3D sensing applications. It is perfect for autonomous robots, automated forklifts, and service robots that require obstacle detection.



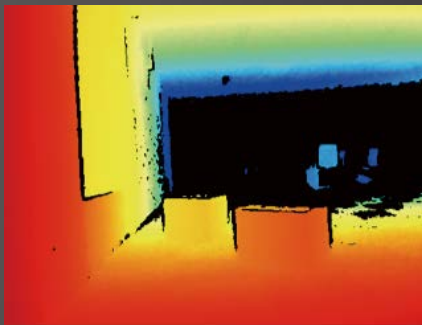
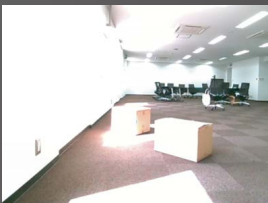
Demonstration
Videos



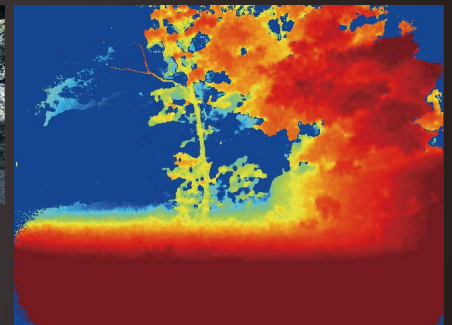
TOPPAN TOF Sensing BLOG

Features

Strong ambient light tolerance

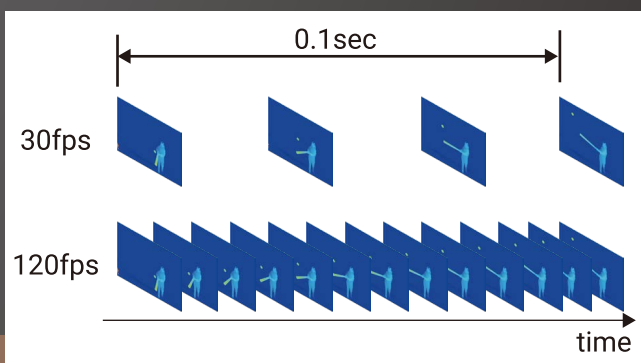


~Near windows~



~Outdoor~

120 fps High speed mode



High dynamic range(HDR) mode

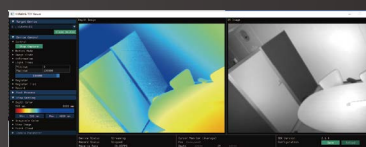


Specification

ToF sensing method	Short pulse type hybrid ToF method	Ambient light tolerance	Max. 100,000lx
ToF sensor	TPHT4030 (TOPPAN original 3D ToF sensor)	Camera FoV	90° (H) x 67° (V)
Number of active pixels	640 × 480 pixels	USB port (I/F Hub)	USB3.1 Gen1 (Port: Type C)
Working range	0.5 ~ 7m	Communication protocol	UVC1.5
Light source	2 × VCSEL (λ=940nm) [class 1 laser product : (IEC 60825-1:2014, EN 50689:2021)]	Camera synchronization signal	Hardware trigger (primary and secondary connections)
Depth noise (repeatability)	≤1% (@distance, 30fps typical)	Power	12V/≤3A (Typ. 10W)
Distance accuracy	≤1% (@distance, 30fps typical)	Dustproof Waterproof Standard	IP67@Camera Body
Frame rate	15fps, 30fps, 60fps (Standard mode) Max. 120fps(High speed mode) HDR mode (15fps, 30fps, 60fps)	Development environment	Windows 11/10, Linux (Ubuntu20.04) ROS2, Jetson

Contents

- ToF camera body
- ToF camera I/F Hub
- Power supply adaptor
- USB cable
- Software (*senSPure™* SDK)
- Documentation (User's Manual, SDK Manuals)



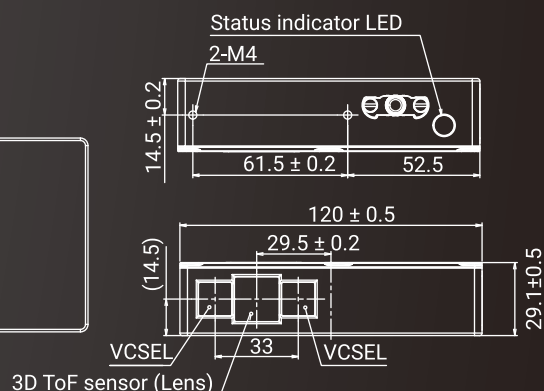
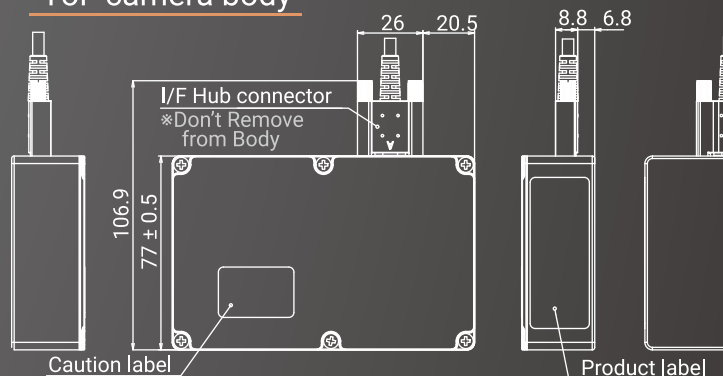
Sample Viewer



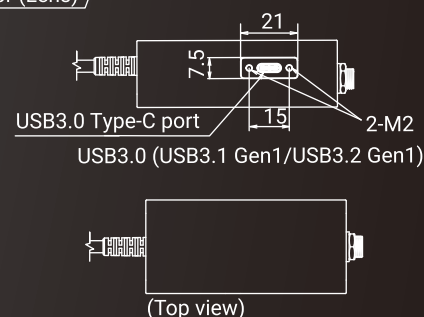
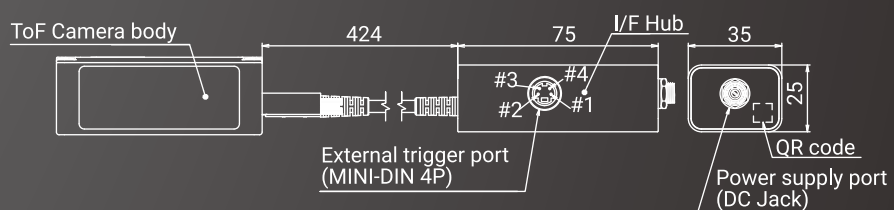
senSPure™ series
3D ToF Camera C11

Dimensions

ToF camera body



ToF camera I/F Hub



Contact

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