LuminWave

High-precision RGBD Camera

Sony DepthSense® Technology	High-precision Edge Segmentation
Colourly PiontCloud	High Accuracy with sub millimeter Precision

▪ Description

The product is based on the 3D TOF camera and combined with the RGB module to form an RGB-D depth camera product. The product can achieve microsecond-level synchronous output of RGB images and TOF images, accurately capturing three-dimensional data of objects.

The product has millimeter-level measurement accuracy, supports RGB mode, and supports point cloud and RGB alignment. It can meet the application requirements of complex environments and is not interfered by ambient light. It can be widely used in application scenarios such as logistics automation, mobile robots, industrial safety protection, and passenger flow statistics.

▪ Features

Sony DepthSense® Technology	High Accuracy with sub millimeter Precision	Colourly PiontCloud
Multiple Filtering Algorithms	High-precision Edge Segmentation	Microsecond Synchronization of RGB and TOF images
Support Software/Hardware Triggering Method	Anti-interference Ambient Light, 100Klux	Support Multi SDK Platform
High Stable and Reliable, IP67	Eye Safety Class 1	Global-shutter Exposure Technology, Supports High-speed Capture

▪ Applications

- Visual Control for Delta Robot
- Container/Box Positioning
- AGV Obstacle Avoidance
- Construction Machines Obstacle Avoidance
- Dynamic Sorting And Separating Packages
- Volume Measurement

■ Specifications

Product Number	LWP-D301C	LWP-D302C
Working Principle	TOF+RGB	
sensor	Sony DepthSense® TOF IMX570	
Laser	940nm VCSEL*2	
Working Range	0.4m~5m	
Ranging accuracy	<1% (@2m≤5mm)	
TOF FOV (H x V)	70° x 50°, customizable up to 103 ° x 81 °	
RGB FOV (H x V)	70° x 50°	
TOF Resolution	640 x 480 pixel	
RGB Resolution	1600 x 1200 pixel (global exposure)	
Frame Rate	Max.30fps	
Eye Safety	Class 1	

Function		LWP-D301C	LWP-D302C
Function	HDR Function	Support	
	Exposure Time	Support	
	Various Filter Settings	Support	
	Output Data Format	RAW12 (depth map, IR map, point cloud) +RGB	
	RGB/TOF time synchronization	Microsecond level synchronization	
Power supply	Power supply	12~24V DC	
	Power Consumption	<10W	
	Network Interface	RJ45 1000M Ethernet	Aviation plug：8 pin*M12 X-code
	Power Interface	6.4mm DC	Aviation plug：8 pin*M12 A-code
Physical	Dimensions (L x W x H)*	116.2mm x 63.5mm x 76mm	
	weight	680g	706g
	Operating Temperature	-20℃~50℃	
	Storage Temperature	-30℃~70℃	
	Protection Level	IP42	IP67
	SDK	Windows 10 and above / Linux	

*The dimensions is excluding plug-ins.
Note: Product specifications and parameters could be updated, please refer to the latest data, by visiting the official website of Luminwave Technology www.luminwave.com