

DM ToF Camera



The DM camera is an industrial-grade (IP67) RGBD smart camera. It has a high-performance iToF sensor based on SONY DepthSense™ technology platform, and powered by the RK3588 processor, which boasts a 6TOPS computing capability. It features high dynamic range (HDR) and high frame rate modes (56fps). Additionally, it offers standardized tutorials for secondary development and a set of basic operator interfaces, enabling users to develop and deploy 3D vision AI application algorithms efficiently.

The product can be widely applied in scenarios such as Logistics Depalletizing, Collision Avoidance, Pallet Recognition, Safety Area Protection, Smart Construction Sites, Agricultural Harvesting, Smart Wheelchairs, Intelligent Security and People Flow Statistics.

Features

- High Dynamic Range (HDR) Mode
- High-Speed (56fps) Mode
- Anti-interference Ambient Light
- 6TOPS NPU Computability
- Built-in Variety of Application Algorithms
- Support Efficient Deployment

Specifications

Product Number	LWP-D322-I LWP-D322-IS	LWP-D322C-I LWP-D322C-IS	LWP-D322W-I LWP-D322W-IS
Operating Principle	ToF (Time-of-Flight) Depth Camera		
Sensor	Sony IMX570		
Laser	940nm VCSEL*2		
*Working Distance	0.2m-10m		
Ranging Accuracy	±3mm+0.25%*depth		
ToF Field of View (H x V)	70°*50°		103°*81°
ToF Resolution	640*480dpi		
RGB Resolution	1600*1200dpi		
Frame Rate	Standard mode: Max 28fps High speed mode: Max 56fps		
Human Eye Safety	Class 1		
Function	HDR Function		
	Normal HDR, High-precision HDR		
	Exposure Time		
	0-4000μs Exposure time adjustment		
Filters			
Support multiple filter settings including spatial, temporal, confidence, and fly point filters			
Interface	Output Data Type		
	Depth、IR、 PointCloud、IMU	Depth、IR、 PointCloud、 IMU、RGB (YUV)	Depth、IR、 PointCloud、IMU
	Power Supply		
	DC (12V-24V)		
Power Consumption			
<10W			
Network Interface			
M12, 8-pin; X-coded; female			
*Power and I/O Interface			
M8, 8-pin; A-coded; female 2-pin can;2-pin DC (12-24V) ;4-pin Optocoupler isolation IO (one in one out)			
Physics	* Dimensions (L*W*H)		
	108mm x 39mm x 60mm		
	Weight		
	366g		
	*Operating Temperature		
-30°C ~ 65°C			
Storage Temperature			
-40°C ~ 85°C			
Protection Class			
IP67			
SDK Operating System			
Windows 10/ Ubuntu 20.04/Ros1			

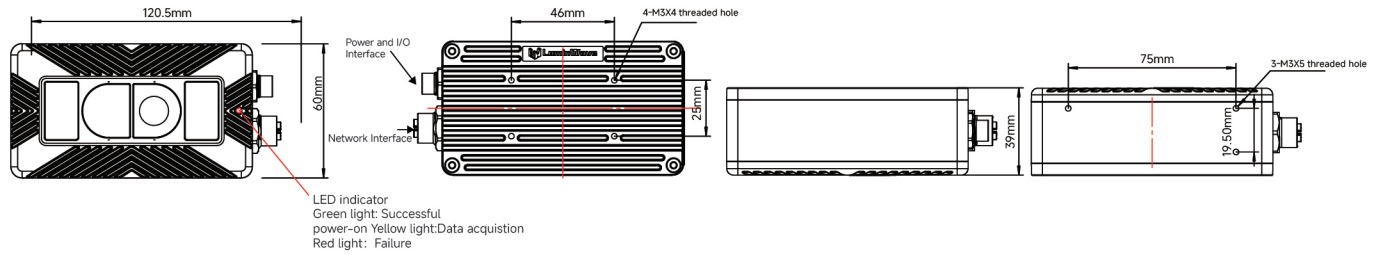
*Dimensions: Dimensions of the main body.

*Operating Temperature: Extreme operating temperatures may affect product performance. If you have such requirements, please consult our technical staff first.

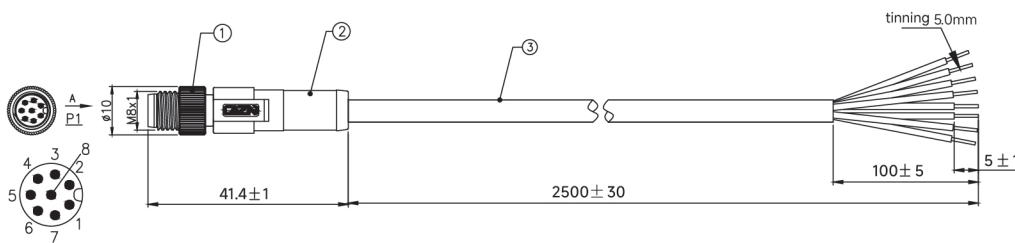
*Power and I/O Interface: Ensure that the device's power supply voltage is within the range of 7-24.8VDC. Voltage outside this range will affect the device's normal startup.

*Working Distance: The default range is 0.2-5m; for a 10m version, please contact our sales staff for customization.

Dimensions



Power and IO Interface



M8 A-code	Definition	Cable Color
PIN1	GND	Black
PIN2	VIN	Red
PIN3	CNAL	Brown
PIN4	CNAH	Green
PIN5	GPIO OUT+	White
PIN6	GPIO OUT-	Yellow
PIN7	GPIO IN-	Gray
PIN8	GPIO IN+	Blue

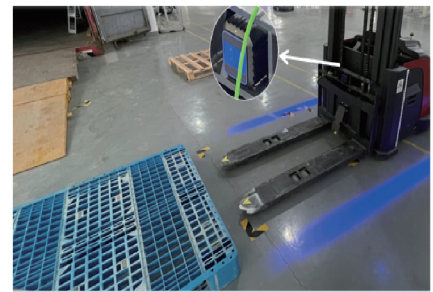
Applications



Depalletizing of Soft Packages



Filling-port Position



Pallet Recognition



People Flow Statistics



Safety Area Protection



Sorting and Gripping



Hangzhou LuminWave Technology Co.,Ltd

④ Add:12/F,B/ B., INVENTR Bdg., No. 4
59 Jianghong Rd., Binjiang Dist.,
Hangzhou, Zhejiang Prov., China

① WA: +86 19157800366

✉ Mail: sales@luminwave.com

🌐 Web: www.luminwave.com