

DTOF MRP-LD1



The dToF area array module adopts newly developed hybrid stacked integrated Single-Photon Avalanche Diode (SPAD) technology and VCSEL laser. Based on the dToF ranging principle, it realizes 3D image output and is widely used in scenarios such as UAV altitude hold and leveling, auxiliary focusing, security surveillance, navigation and obstacle avoidance.

Product Applications

- * Robot Navigation
- * UAV Obstacle Avoidance
- * AR/VR
- * Industrial Inspection

Specifications

Parameters	Description
Ranging Principle	dTOF
Scanning Principle	SPAD
Wavelength	940nm VCSEL
Laser Class	Class 1 (FDA recognized eye-safe)
Ranging Capability	Indoor: 0.5-25m Outdoor: 0.2-8m
Ambient Light Resistance	80Klux
Ranging Accuracy	0.2-1m $\leq$ $\pm$ 3cm; 1-5m $\leq$ $\pm$ 5cm; 5-8m $\leq$ $\pm$ 10cm; 8-15m $\leq$ $\pm$ 20cm;
FOV	60°(H) x45°(V)
Resolution	40*30
Frame Rate	10fps
Interface	UART/UVC/UDP
Operating Temperature	-20~60°C
Storage Temperature	-30~70°C
Power Supply	5V
Software	Support Windows/ARM /Linux/Android
Power Consumption	1.2 W
Weight	8g

Point Cloud Visualization

