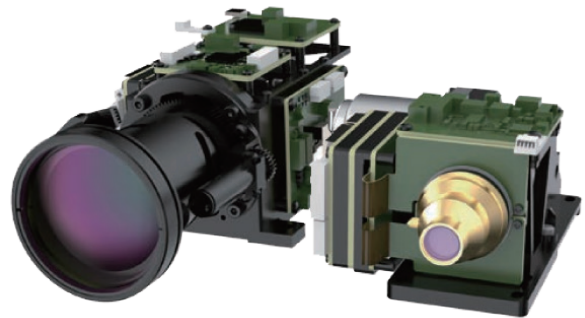


Photon M615L

Medium-Wave Cooled Infrared Module

Photon M615L medium-wave cooled infrared module is provided with the high-performance HgCdTe cooled infrared FPA detector, and carried with the self-developed image processing algorithm. It reaches the frame rate of up to 100Hz, and has the NETD as low as 15mK. It supports multiple digital video interfaces, is suitable for multiple focus and continuous zoom lenses, and is widely applied in sighting distance enhancement, border and coastal surveillance and other scenarios. It provides an SDK, which is simple and easy to use, reducing secondary development costs.



Product Imaging

Delicate Images with High Sensitivity

- The NETD is as low as 15mK, meeting the requirements of long-distance observation of tiny targets.



Self-Developed Algorithm for Intelligent Imaging

- Equipped with a new self-developed image algorithm, it supports a wide dynamic range and adaptive integral time, providing the best imaging effect for different scenarios.



Higher Frame Rate for Timely Capture

- The resolution is up to 640×512 and the frame rate is as high as 50Hz, meeting the requirements of large-range dynamic target capture.



Applications



Border Surveillance



Coastal Surveillance



Handheld Device



Vision Enhancement

Specifications

Product Model		Photon M615L
Specifications		
Detector Type	Mercury cadmium telluride refrigerated infrared focal plane detector	
Resolution	640×512	
Pixel Pitch	15μm	
Frame Rate	50Hz/30Hz	
F #	F4.0/F5.5	
Response Band	3.7~4.8μm	
NETD	≤15mK@25°C	
Detector Dead-pixel Rate	≤0.5%	
Cooled Time@25°C	≤7min	
Optional Lens	Straight-tube Focus free : 50mm, 100mm	
	Straight-tube continuous zoom: 15~300mm, 18~275mm, 25~460mm, 33~660mm, 88~1100mm	
	Folded-path continuous zoom: 88~1100mm	
Image Adjustment		
Brightness/Contrast Adjustment	Automatic/manual	
Polarity	Black hot / white hot (default)	
Cross Cursor	Display/hide/move	
Electronic Zoom	1.0~8.0× continuous zoom (step 0.1×)	
Image Processing	Non-uniformity correction, digital filtering noise reduction, digital detail enhancement	
Image Flip	Left/right, up/down, diagonal flip	
Power Source		
Power Supply Range	11~13V DC (without isolation board), typical voltage:12V	
Typical Power Consumption @25°C	Stable power consumption≤ 10W, peak power consumption≤ 25W	
Interface		
Analog Video	PAL format	
Digital Video	Cameralink/SDI/Ethernet	
Serial Communication Interface	RS422 (default baud rate: 115200)	
External Synchronization	Internal synchronization (default)/external synchronous output/external synchronous input/adaptive synchronization	
Physical Properties		
Dimensions (no lens)	120 mm×88 mm×57mm (Without spacer plate)	
Weight (no lens)	≤ 480g (without spacer plate)	
Environmental Adaptability		
Operating Case Temperature	-40°C~-60°C	
Storage Case Temperature	-45°C~-65°C	
Temperature Shock	-45°C~+65°C (≤5°C/min)	
Random Vibration	4.2g	
Shock	Sawtooth waveform, 40g, 11ms (3 axes/ 6 directions, 3 times each)	
MTTF	≥6000h	
Storage Life	≥10years	

Company Profile

Raytron Microelectronics Co., Ltd. is a wholly-owned subsidiary of Raytron Technology Co., Ltd., providing global customers with infrared detectors, core modules, and industry solutions.

Our products are widely used in various fields, including infrared temperature measurement, night vision observation, machine vision, intelligent driving, Commercial Drone, smart industry, security monitoring, Internet of Things, medical epidemic prevention and gas detection.

With the mission of "to create incremental value for customers with technological advancements", we are committed to leaving a name in the history of constantly expanding human perception capabilities.



Official Website



LinkedIn Official Account

Raytron Microelectronics Co., Ltd.
Tel (Global): +86 400-998-9038
WhatsApp Business: +86 198 0619 1838
Email: marketing@raytrontek.com
Website: www.raytron-microelectronics.com
Version: PL202610V1