

Photon L615

Long-Wave Cooled Infrared Module

Photon L615 long-wave cooled infrared module is provided with the high-performance T2SL cooled infrared FPA detector and carried with the self-developed image processing algorithm. With better sand and dust penetrability, and anti-interference capacity of reflected light, it reaches a frame rate of up to 100Hz. It supports multiple digital video interfaces, is suitable for multiple fixed focus and continuous zoom lenses, and is widely applied in sighting distance enhancement, border and coastal surveillance, UAV detection, and other scenarios. It provides an SDK, which is simple and easy to use, reducing secondary development costs.



Product Highlights

Delicate Images with High Sensitivity

- The NETD is as low as 25mK, 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.



Wider Band and Precise Focus

- It covers bands from 7.7 to 10μm and supports various fixed and continuous zoom lenses, meeting the needs of multi-scenario applications.



Higher Frame Rate for Timely Capture

- The resolution is up to 640×512 and the frame rate is as high as 100Hz, meeting the requirements of large-range dynamic target capture.



Specifications

Product Model		Photon L615	
Specifications			
Detector Type		II superlattice-like refrigerated infrared focal plane detector	
Resolution		640×512	
Pixel Pitch		15μm	
Frame Rate		100Hz/50Hz/30Hz	
F #		F2.0	
Response Band		7.7-10μm	
NETD		≤25mK@25°C	
Detector Dead-pixel Rate		≤0.5%	
Cooled Time@25°C		≤7min	
Optional Lens		Straight-tube Focus free : 50mm Straight-tube continuous zoom:15–200mm, 20–300mm	
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		26~32V DC, typical voltage: 28V	
Typical Power Consumption @25°C		Stable power consumption≤ 12W, peak power consumption≤ 25W	
Interface			
Analog Video		PAL format	
Digital Video		Cameralink	
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)		121mm×75mm×79mm	
Weight (no lens)		≤870g	
Environmental Adaptability			
Operating Case Temperature		-40°C~-60°C	
Storage Case Temperature		-45°C~+65°C	
Random Vibration		6.06g	
Shock		Sawtooth waveform, 30g, 11ms (3 axes/ 6 directions, 3 times each)	
MTTF		≥10000h	
Storage Life		≥15 years	

Applications



Border Surveillance



Coastal Surveillance



Handheld Device



Vision Enhancement

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