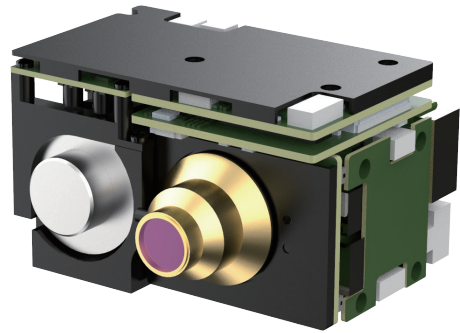


Photon H615

Medium-Wave HOT Cooled Infrared Module

Photon H615 medium-wave HOT cooled infrared module is provided with the high-performance T2SL cooled infrared FPA detector, is designed with SWaP, and is carried with the self-developed image processing algorithm. It works flexibly and reliably and plots quickly. It supports multiple digital video interfaces, is suitable for multiple focus and continuous zoom lenses, and is widely applied in the mini pod, handheld, perimeter surveillance and other scenarios. It provides an SDK, which is simple and easy to use, reducing secondary development costs.



Product Highlights

Industry-Leading SWaP Design

- The dimensions are as small as $76.5 \times 69.2 \times 46.6$ mm, weight is as low as 359g, and power consumption is as low as 6W, meeting the needs of miniaturized applications.



Delicate Images with High Sensitivity

- The NETD is as low as 20mK, 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.



Fast Imaging for Timely Capture

- Featuring the new generation T2SL detector, it has a resolution of up to 640×512 , a frame rate of up to 50Hz, and a cooling time as low as 2.5 minutes, meeting the requirements of large-range dynamic target capture.



High Reliability and Durability

- The mean time to failure (MTTF) is up to 20000h, and the operating temperature ranges from -40°C to $+70^{\circ}\text{C}$, ensuring reliable performance in extreme environments such as polar regions or deserts.



Specifications

Model	Photon H615
Performance Characteristics	
Detector Type	T2SL Cooled Infrared FPA
Resolution	640×512
Frame rate	50Hz/30Hz
Pixel Pitch	15μm
Spectral Band	3.7~4.8μm
NETD	≤20mK@F4.0, 25°C/≤25mK@F5.5, 25°C
Image Adjustment	
Brightness/Contrast Adjustment	Manual/Auto
Polarity	Black-hot/White-hot (white-hot by default)
Palette	Multiple types supported
Reticle	Display/Blank/Move
Image Processing	Non-uniformity correction, digital filter noise reduction, digital detail enhancement
Mirroring	Horizontal/Vertical/Diagonal
Power Supply	
Power Supply Range (Typical)	12±0.5V DC
Power Consumption (Typical, @25°C)	Stable power consumption ≤ 6W, peak power consumption ≤ 12W@Cameralink/ Stable power consumption ≤ 7W, peak power consumption ≤ 13W@SDI
Interface	
Analog Video	PAL
Digital Video	Cameralink/SDI
Serial Communication Interface	RS422 (default baud rate: 115200)
Synchronization Mode	Internal synchronization (default)/External synchronization/Adaptive synchronization mode
Physical Characteristics	
Dimensions (Without lens)	76.5×69.2×46.6mm
Weight (Without lens)	364g@Cameralink/359g@SDI
Environment Adaptability	
Operating Temperature	-40°C~+70°C
Storage Temperature	-45°C~+75°C
Random Vibration	4.16g
Shock	Final peak sawtooth wave, 30g, 11ms (18 times in 3 axes and 6 directions in total)
MTTF	≥20000h

Applications



Perimeter Surveillance



Nature Reserve



UAV



Handheld Device

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The information is for illustrative purposes only. The pictures and technical specifications are subject to change without notice. Sample No.: O2025-Photon H615-2P001