

Photon C330B

Cooled VOCs Gas Detection Thermal Camera

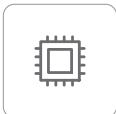
Photon C330B cooled VOCs Gas Detection thermal camera is exclusively designed to detect leakage of organic compounds (VOCs) around the wavelength of $3.3\mu\text{m}$. It features low NETD and a high response rate, converting invisible gases into visible infrared images. It is widely used in fields such as the petrochemical industry, natural gas transportation, and environmental monitoring. The product series supports multiple video output interfaces, providing complete solutions for secondary development of products such as handheld products, UAVs, robots and PTZ.



Product Highlights

High sensitivity and excellent gas visualization capability

- New self-developed gas detection algorithms and NETD as low as 10mK to satisfy observation requirements of remote or micro leakage.



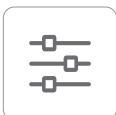
Rich products to satisfy application requirements in various scenarios

- Equipped with multiple detectors and lenses to satisfy application requirements in different scenarios.



Multiple output interfaces for convenient and efficient secondary development

- Support multiple output interfaces such as PAL, Camera Link, RS422, RS422 servo interface, and RJ45 100M Ethernet port to facilitate secondary development.



Specifications

Model		Photon C330B					
Performance Characteristics							
Detector Type		Cooled Infrared Detector					
Resolution		320×256					
Pixel Pitch		30μm					
F#		1.2					
Frame Rate		25Hz					
Spectral Band		3.2±0.2~3.4±0.2μm					
NETD		≤10mK@25°C					
Cooling Time		≤5min@25°C					
Types of Gases for Leakage Detection	Methane, ethane, propane, butane, pentane, hexane, heptane, octane, ethylene, propylene, isoprene, methanol, ethanol, butanone, benzene, toluene, xylene, ethylbenzene, etc.						
Optical Indicator							
Focal Length	23mm	50mm	25~75mm				
FOV	23.5°×19°	10.97°×8.78°	25mm: 22.2°×17.7° 75mm: 7.3°×5.9°				
Image Adjustment							
Mirroring	Horizontal/Vertical/Diagonal Support (8 palettes)						
Palette							
Digital Zoom	1.0~4.0× continuous zoom (step size: 0.1)						
Image Processing	Non-uniformity correction/Pixel defect correction/Digital filtering noise reduction/Digital detail enhancement/Self-adaptive contrast adjustment						
Power Supply							
Power Interface	DC 24V (Camera Link)/POE IEEE 802.3AT (Ethernet port)						
Power Protection	Overvoltage, undervoltage, and reverse connection supported by user extension components (Camera Link)						
Power Consumption@25°C	Maximum Power Consumption	≤18W (Camera Link) /22W (Ethernet)					
	Stable Power Consumption	≤12W (Camera Link) /15W (Ethernet)					
Interface							
Electrical Interface	Camera Link, RS422, RS422 servo interface (Camera Link) RJ45 100M Ethernet port (Ethernet port)						
Analog Video	PAL system (base) (not available for Ethernet port)						
Digital Video	Camera Link (not available for Ethernet port)						
Control	Software control via the upper computer (RS422; Baud rate: 115200)						
Physical Characteristics							
Weight	850g (Camera Link, without lens) ≤1.0Kg (Camera Link, including the shell & 23mm fixed-focus lens) 1.22Kg (Camera Link, including the shell & 50mm fixed-focus lens) 1.98Kg (Camera Link, including the shell & 25~75mm continuous zoom lens) ≤1.55Kg (Ethernet, including the shell & 50mm fixed-focus lens) ≤2.04Kg (Ethernet, including the shell & 25~75mm continuous zoom lens)						
Dimensions	135×76×87mm (Camera Link, without lens) 173×78×90mm (Ethernet, including the shell, base & 23mm fixed-focus lens) 187×78×90mm (Camera Link, including the shell & 50mm fixed-focus lens) 254.5×103×100mm (Camera Link, including the shell & 25~75mm continuous zoom lens) 187×80×90.2mm (Ethernet, including the shell & 50mm fixed-focus lens) 254.5×105×100mm (Ethernet, including the shell & 25~75mm continuous zoom lens)						
Environment Adaptability							
Operating Temperature	-20°C~+50°C						
Storage Temperature	-30°C~+60°C						

Applications



Gas Detection



Petrochemical Industry



Environmental Monitoring



Gas Transportation

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The information is for illustrative purposes only. The pictures and technical specifications are subject to change without notice. Sample No.: O2024-Photon C330B-2P001