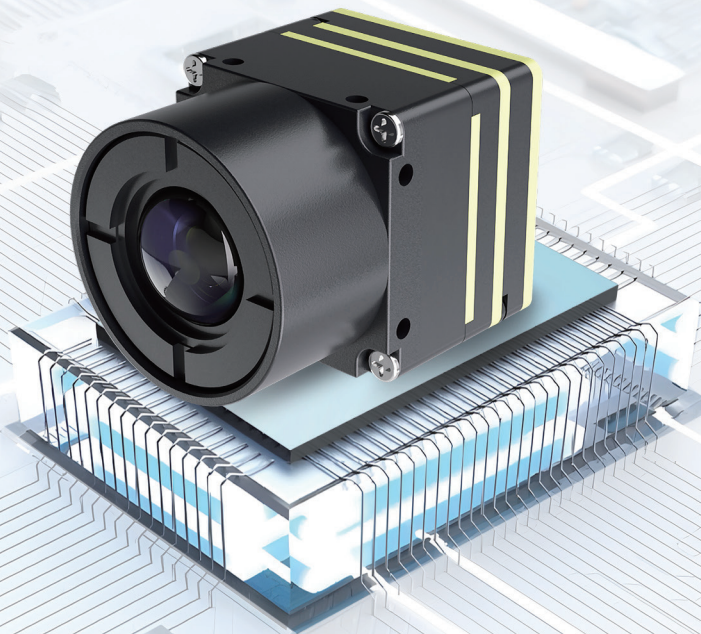




WN2

Imaging Thermal Module

The WN2 series uncooled infrared module offers optional resolutions of 640×512 , 384×288 , and 256×192 , featuring a high-frame-rate $12 \mu\text{m}$ WLP detector and a second-generation self-developed infrared LY300. It delivers high performance in a compact, lightweight design with low power consumption and cost, meeting the SWaP (Size, Weight, and Power/Price) requirements for modern applications.

The entire series is equipped with the shutterless algorithm that ensures smooth and non-choppy images. The next-generation infrared-specific NM3.0 and IM3.0 image processing algorithms can ensure delicate and clear image quality.

The module provides multiple digital interfaces and supports flexible integration with various intelligent processing platforms.



High
Frame Rate



Standard
Shutter-Less Algorithm

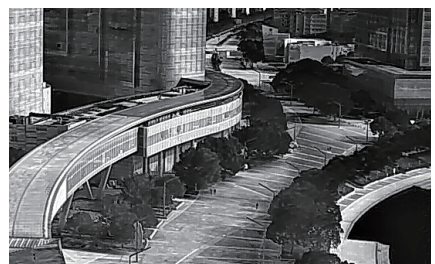
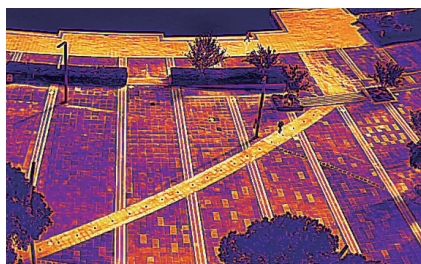


High-Quality
Image Display



Higher Cost
Performance

Product Imaging



Specifications

Product Model	WN2 256		WN2 384		WN2 640
Specifications					
Detector Type	Vanadium oxide uncooled infrared focal plane detector				
Spectral Range	8-14μm				
Pixel Pitch	12μm				
NETD	≤40mK@25°C,F#1.0,25Hz				
Detector Frame Rate	25Hz/50Hz	30Hz/60Hz		30Hz/60Hz	
Image Adjustment					
Brightness/Contrast Adjustment	0~100 levels selectable				
Electronic Zoom	1.0~8.0× continuous zoom (step 0.1×)				
Polarity	Black hot/white hot				
Pseudocolor	Supported				
Crosshair	Display/hide/move				
Image Processing	Non-uniformity correction/digital filtering noise reduction/detail enhancement				
Nonuniformity Correction	Shutter correction/shutterless algorithm correction				
Image Mirroring	Left/right, up/down, diagonal				
Focusing Method	Fixed focus/manual focus lens, optional				
Temperature Measurement					
Range	-20°C~ 150°C (high image quality)100°C~ 650°C (wide range)				
Temperature Measurement Accuracy (Typical value)	±2°C or ±2% of the reading (whichever is greater)				
Temperature Measurement Tools	Analysis tools: spot, line, area				
Information Row	Information bar: displays temperature and other measurement data				
Electrical Parameters					
Power Supply Voltage (Typical)	5V				
Typical Power Consumption @25°C	<0.35W	<0.42W		<0.7W	
Analog Video	PAL/NTSC				
Digital Video	DVP/BT656/USB2.0/MIPI				
Serial Communication Interface	UART/I2C/USB2.0				
Physical Characteristics (Excluding lens and flange)					
Dimensions (W×L×H) mm	21mm×21mm×10.3mm				
Weight (g)	<7g	<7g		<8.6g	
Optional Lenses					
Lens (mm)	4mm/9.1mm/15mm/25mm	4mm/6.8mm/9.1mm/15mm/25mm/35mm		9.1mm/13.5mm/18mm/25mm/35mm/55mm	
Environmental Adaptability					
Operating Case Temperature	-40°C~+ 80°C (-20°C~+ 70°C temperature measurement)				
Storage Case Temperature	-45°C~+85°C				
Humidity	5%~95%, non-condensing				
Vibration	6.06g, random vibration, all axes				
Shock	80g@4ms, sawtooth waveform, 3 axes/ 6 directions			1000g@0.3ms optical axis direction	

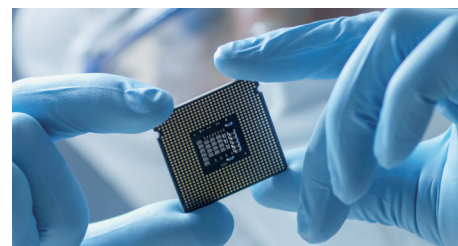
Applications



Portable Terminal



Security/Fire Inspection



Intelligent Integration

Company Profile

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Official Website



LinkedIn Official Account