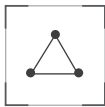




SE5 1280

Uncooled Infrared Thermal Imaging Module

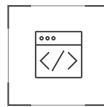
SE5 1280 is a high-resolution (1280×1024) uncooled thermal camera with a self-developed infrared LY300, stable supply, high reliability, and a ceramic package detector for enhanced durability and performance. It features a compact size, low power consumption and long standby time. SE5 1280 offers multiple image modes including edge outlining mode, allowing users to choose the best one for different industry applications. SE5 1280 applies to multiple scenarios, e.g. security, handheld devices, night vision, etc.



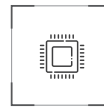
High
Reliability



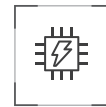
High-Quality
Image



Rich in
Functions

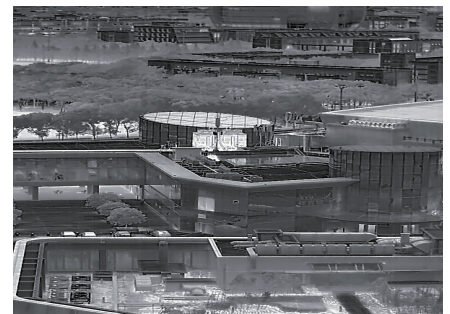


Self-Developed
Infrared ISP



Low Power
Consumption

Product Imaging



Specifications

Product Model		SE5 1280
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	50Hz(imaging), 30Hz(temperature measurement)	
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	Athermalized prime/manual focus lens	
Temperature Measurement		
Range	High image quality: -20°C~ +150°C; wide range: 50°C~ +600°C	
Temperature Measurement Accuracy (Typical value)	Target temperature: -20°C ~+150°C, accuracy: ±2°C or ±2% of the reading Target temperature: 50°C ~+600°C, accuracy: ±5°C or ±3% of the reading	
Temperature Measurement Tools	Analysis tools: spot, line, area	
Information Row	Information bar: displays temperature and other measurement data	
Isothermal Pseudocolor	Supported	
Electrical Parameters		
Power Supply Voltage (Typical)	5V	
Typical Power Consumption @25°C	<1.3W	
Analog Video	/	
Digital Video	DVP/BT1120/ MIPI/USB3.0	
Serial Communication Interface	UART/I2C	
Physical Characteristics (Excluding lens and flange)		
Dimensions (W×L×H) mm	29mm×29mm×15.7mm	
Weight(g)	<26g	
Optional Lenses		
Lens (mm)	19mm/35mm/55mm	
Environmental Adaptability		
Operating Case Temperature	Imaging (-40°C ~+80°C), temperature measurement (-20°C ~+60°C)	
Storage Case Temperature	-50°C~+85°C	
Humidity	5% ~95%, non-condensing	
Vibration	6.06g, random vibration, all axes	
Shock	1000g@0.3ms optical axis direction	

Applications



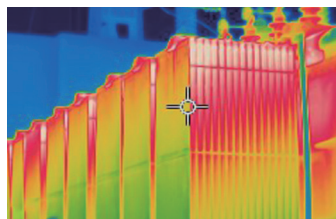
Handheld Devices



Fire Inspection



Safety Monitoring



Industrial Temperature Measurement

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

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