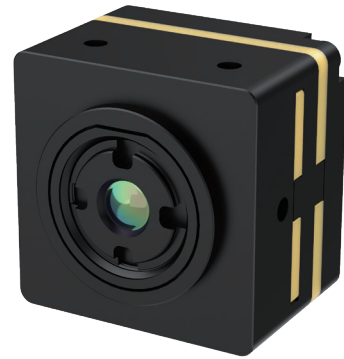**Raythink**

Turing L256
Uncooled Infrared Module (Temperature Measurement)

Turing L256 uncooled iInfrared module is equipped with an advanced 256×192 wafer detector with a dimension of 18×18mm. Thanks to its integrated design, it redefines standards in weight, dimension and power consumption (SWaP³) in the OEM module industry. As the best choice for low-cost solutions, it can be used in many fields such as industry, power, security, and machine vision.

Product Highlights

Compatibility Design
- Its resolution is 256×192 and dimension is 18mm×18mm, which are consistent with those of the L384 mechanical interface for compatibility design.

Excellent Performance
- -20℃~+550℃ wide measurement range to satisfy application requirements in different scenarios.

Multiple Selections
- The FOV is 20°~90° and the extension supports DVP/USB.

Specifications

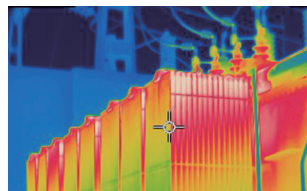| Model	Turing L256 Temperature Measurement
Performance Characteristics	
Detector Type	Uncooled VOx Infrared Detector
Resolution	256×192
Pixel Pitch	12μm
Frame Rate	25Hz
Spectral Band	8~14μm
NETD	≤50mK@25℃
Image Adjustment	
Brightness/Contrast Adjustment	Manual/Automatic
Polarity	Black-hot/White-hot
Palette	It supports multiple types.
Reticle	Display/Blank/Move
Image Processing	Digital filtering noise reduction/Digital detail enhancement
Mirroring	Horizontal/Vertical/Diagonal
Power Supply	
Power Supply Range	3.8~5.2V DC/1.8V/3.3V
Power Consumption (Typical, @25℃, Without Extension)	≤0.3W
Interface	
Digital Video	CDS3
Serial Communication Interface	UART
Extension Components	USB2.0
Temperature Measurement Characteristics	
Measurement Range	For temperature measurement series, -20℃~+550℃
Measurement Accuracy	For temperature measurement series, ±3℃ or ±3% of reading at ambient temperature of -20℃~+60℃
Physical Characteristics	
Dimensions (Without Lens and Extension Components)	18×18mm
Weight (3.2mm, Without Extension Components)	About 8.7g
Lens	2mm, 3.2mm, 7mm, 10mm, and 13mm
Environment Adaptability	
Operating Temperature	-20℃~60℃
Storage Temperature	-45℃~+85℃
Humidity	5~95%, non-condensing
Product Certification	RoHS2.0

Applications

UAV

Security Monitoring

Industrial Temperature Measurement

Machine Vision

Raythink Technology Co., Ltd.