Raythink

Turing L384
Uncooled Infrared Module

Turing L384 uncooled infrared module has made further technical breakthroughs, redefining the new standard of weight, dimensions, and power consumption (SWaP^3) in the infrared OEM module industry. It meets professional needs in the fields of routine inspection, security, search and rescue, and industrial monitoring and provides excellent miniaturized high-resolution solutions for consumer products.

Product Highlights

SWaP^3 Design

- Its resolution is 384×288, dimension is 18×18mm, and weight is 3.5g, and it is a low-cost solution.

Excellent Performance

- It supports shutterless correction algorithm to provide a smooth and continuous user experience.

Multiple Selections

- Its FOV covers 10°~90°, and it supports multiple interfaces, such as MIPI/USB/BT.656/analog video.
- Equipped with leading programmable modules, it features flexible architecture, multiple functions, and high customizability.

Specifications

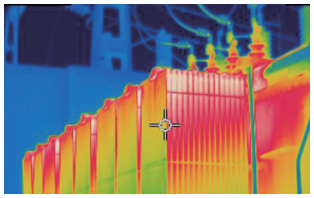
Model	Turing L384 Imaging	Turing L384 Temperature Measurement
Performance Characteristics		
Detector Type	Uncooled VOx infrared detector	
Resolution	384×288	
Pixel Pitch	12μm	
Frame Rate	50Hz	25Hz
Spectral Band	8~14μm	
NETD	⩽50mK@25°C (⩽40mK, optional)	
Image Adjustment		
Brightness/Contrast Adjustment	Manual/Automatic	
Polarity	Black-hot/White-hot	
Palette	Multiple types supported	
Reticle	Display/Blank/Move	
Image Processing	Shutterless	TEC-less temperature control algorithm
	Digital filter noise reduction/digital detail enhancement	
Mirror Image	Horizontal/Vertical/Diagonal	
Power Supply		
Power Supply Range(1)	⩽0.35W (Typical, @25°C, Without Extension)	
Power Consumption	⩽0.35W (Typical, @25°C, Without Extension)	⩽0.25W (Typical, @25°C, Without Extension)
Interface		
Digital Video	BT.656/BT.1120/LVCMOS	CDS2
Serial Communication Interface	UART	
Extension Components	USB2.0/Analog video	
Temperature Measurement Characteristics		
Temperature Measurement Range	/	For temperature measurement series, -20°C~+550°C (+650°C customizable)
Measurement Accuracy	/	For temperature measurement series, ±3°C or ±3% at ambient temperature of -20°C~+60°C (±2°C optional)
Measurement Tool	/	For temperature measurement series, secondary analysis of points, lines, and areas
Physical Characteristics		
Dimensions (Without Lens and Extension Components)	18×18mm	
Weight (Without Lens and Extension Components)	3.5g	
Lens	2.88mm/5.3mm/9mm/19mm	
Environment Adaptability		
Operating Temperature	-40°C~+80°C (-20°C~60°C measurement)	
Storage Temperature	-45°C~+85°C	
Humidity	5~95%, non-condensing	
Product Certification	RoHS2.0	

(1)Please refer to the product manual for power supply requirements

Applications

UAV

Security Monitoring



Industrial Temperature Measurement

Machine Vision

Raythink Technology Co., Ltd.

Company Address: No.5 Wanshoushan Road, Fulaishan Street, Yantai Area of China (Shandong) Pilot Free Trade Zone Postal Code: 264000

Official Website: http://www.raythink-tech.com Service Email: sales@raythink-tech.com