

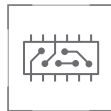
LCM160

Uncooled Infrared Thermal Module

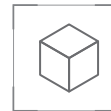
LCM160 is a long-wave infrared (8~14 μ m, LWIR) infrared thermal imaging module, which can convert the thermal radiation of the object itself into a digital signal output. The product is composed of a detector, shutter, a lens, and structural components, the host completes the corresponding ISP algorithm processing. The product is small, light in weight, and low in power consumption, and is suitable for security monitoring, thermal measurement devices, smart home appliances and other fields.



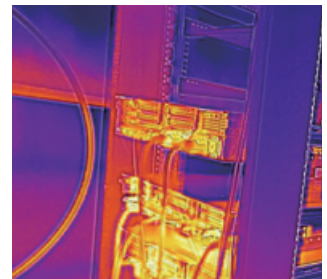
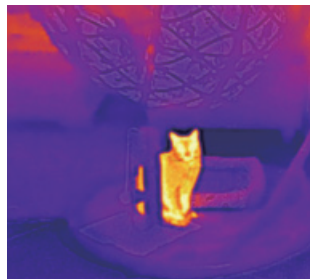
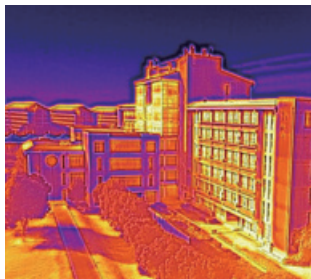
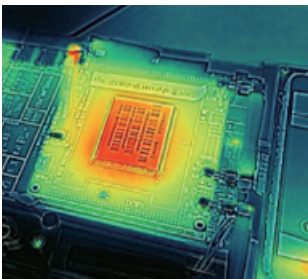
Low Cost



Advanced
Support System



Simple Structure with
Strong Robustness



Specifications

Product Model		LCM 160
Specifications		
Detector Type	Vanadium oxide uncooled infraredfocal plane detector	
Spectral Range	8-14μm	
Pixel Pitch	12μm	
NETD	<50mK @25°C, F#1.0, 25Hz	
Detector Frame Rate	25Hz	
Image Adjustment		
Brightness/Contrast Adjustment	0-100 levels selectable	
Polarity	White hot/black hot	
Pseudocolor	Supported	
Nonuniformity Correction	Supports on-chip 4-bit non-uniformitycorrection and shutter correction	
Focusing Method	Athermalized prime lens	
Temperature Measurement		
Range	-20°C~ 150°C (high image quality)0°C~ 550°C (wide range)	
Temperature Measurement Accuracy (Typical value)	±2°C or ±2% of the reading (whichever is greater)	
Electrical Parameters		
Power Supply Voltage (Typical)	5V (analog), 1.8V (digital)	
Typical Power Consumption @25°C	<0.045W	
Digital Video	8-bit standard parallel port	
Serial Communication Interface	I2C	
Physical Characteristics(Excluding lens and flange)		
Dimensions (W×L×H) mm	17.9mm×16.8mm×9.9mm	
Weight(g)	2.4g	
Optional Lenses		
Lens (mm)	2.6mm	
Environmental Adaptability		
Operating Case Temperature	-20°C~+60°C	
Storage Case Temperature	-45°C~+85°C	
Humidity	5%~95%, non-condensing	
Vibration	6.06g, random vibration, all axes	
Shock	25g, 11ms, half-sine waveform, 3 axes	

Applications



Smart Life



Handheld Terminal



Security Inspection



Fire Safety



Medical Health

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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