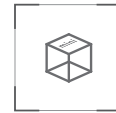


ECOT

Uncooled Infrared Thermal Module

ECO series is a long-wave infrared (8-14 μ m, LWIR) uncooled infrared thermal imaging module, which can convert the thermal radiation of the object itself into image and temperature data. The product is small, light in weight, and low in power consumption, and is suitable for mobile phones, temperature measurement devices, consumer electronics, smart home appliances and other fields.



Compact Size



Light weight
Design



Optimized for
Mobile Devices



Low Power
Consumption

Specifications

Product Model	ECOT
Overview	
Detector Type	Vanadium Oxide Uncooled Infrared Focal Plane Detector
IR Wavelength	8~14μm
Resolution	160×120
Pixel Pitch	12μm
Noise Equivalent Temperature Difference (NETD)	<50mK @25°C, F#1.0, 25Hz
Thermal Time Constant	<10ms
Detector Framerate	≤25Hz
Non-uniformity Correction	Supports on-chip 4-bit non-uniformity correction and shutter correction.
Image Output Formats	Standard parallel port output, line by line output, black-hot, Raw 14bit
Focusing Mode	Fixed focus, athermalized
Temperature Measurement	
Measurement Range	-15°C~150°C (high quality) 50°C~550°C (wide range)
Measurement Accuracy(typ.)	±3°C or ±3%
Electricity	
Input Supply Voltage	5V(analog), 3.3V,1.8V
Video Output Format	8-bits standard parallel port
Command and Control Interface	I2C
Typical Power Consumption@25°C(typ.)	Normal mode:45 mW Peak (shutter power consumption):750 mW
Physical Characteristics of Module (lens and flange not included)	
Package Dimension (W×L×H)	10.5mm×10.5mm×5.8mm (as per drawing)
Environment	
Operating Temperature (typ.)	Imaging:-20°C~70°C; Temperature measurement:-10°C~50°C
Storage Temperature (typ.)	-45°C~85°C

Applications



Mobile Phones & Tablets



IoT Devices

Company Profile

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