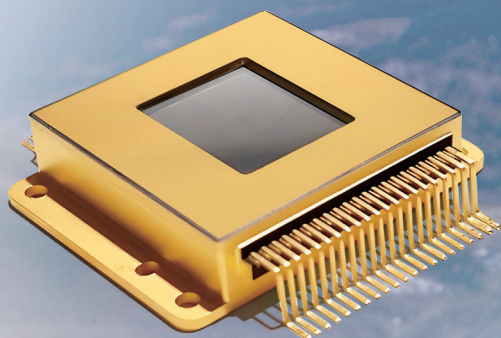




RS6152M1

Short-Wave Infrared InGaAs Focal Plane Detector

RS6152M1 is a digital short-wave infrared InGaAs focal plane detector with an area array size of 640×512 and a pixel pitch of $15 \mu\text{m}$. It supports high frame rate operation and MROI multi-windowing, with the hermetically sealed package and built-in TEC for active temperature control. This detector features high sensitivity, low power consumption, and multifunctionality. It can be widely used in machine vision, spectral imaging, visual enhancement, laser detection, and other fields.



Digital



MROI



Low Noise



Low Power
Consumption



Multifunction



Built-in TEC

Product Imaging



Specifications

Product Model	RS6152M1
Sensor	InGaAs
Spectral Response Range	0.9~1.7 μ m
Quantum Efficiency	>70%(1.0~1.6 μ m)
Optical Fill Factor	100%
Pixel Pitch	15 μ m
Area Array Size	640 $\times$ 512
Effective Pixel Rate	$\geq$ 99.8%
Maximum Frame Rate	120fps (full window)
Integration Type	Global shutter
Minimum Integration Time	1 μ s
Readout Noise (Typical)	35e@20 °C, high gain mode
Optional Gain	3-level
Average Pixel Dark Current	$\leq$ 100ke/s@20°C
Operating Power Consumption	$\leq$ 200mW
Signal Output Swing	/
Effective Data Output Bit Depth	13bit
Dynamic Range	$\geq$ 50dB
Response Inhomogeneity	$\leq$ 5%, non-corrected
Packaging Type	Gas-tight metal packaging (built-in single stage TEC)
Outline Dimensions	32.0mm $\times$ 23.5mm $\times$ 7.0mm (excluding pin size)
Device Weight	25 $\pm$ 2g
Operating Environment Temperature	40°C~+65°C
Storage Environment Temperature	-45°C~+70°C

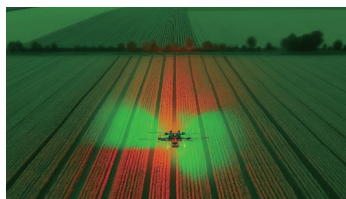
Applications



Vision Enhancement



Machine Vision



Spectral Imaging



Laser Welding

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