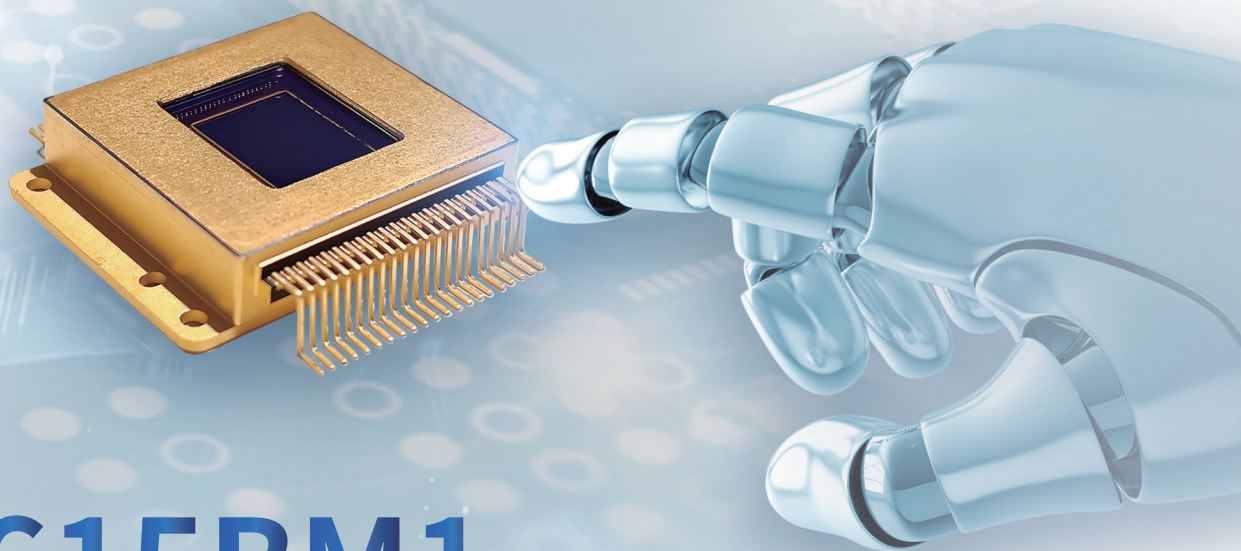




RS615BM1

Short-Wave Infrared Focal Plane Detector

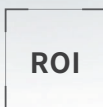
The RS615BM1 is a general-purpose short-wave infrared InGaAs focal plane detector with an area array size of 640×512 and a pixel pitch of $15\mu\text{m}$. It supports high frame rate operation and ROI windowing and is housed in a hermetically sealed metal package with a built-in TEC for active temperature control. The product features high sensitivity, low power consumption, and multifunctionality. It can be widely used in applications such as visual enhancement, machine vision, photovoltaic inspection, industrial sorting, and laser detection.



Low Noise



Higher
Frame Rate



Supports
High-Speed
ROI



Low Power
Consumption

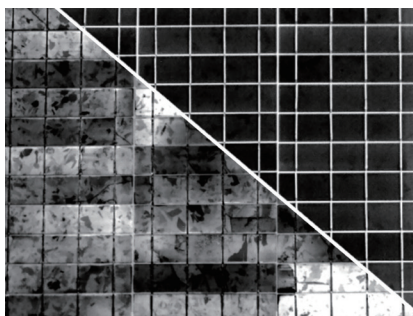


Multifunction



Built-in TEC

Product Imaging



Specifications

Product Model	RS615BM1
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	400fps@25MHz (full window)
Maximum Frame Rate	120fps (full window)
Integration Type	5 μ s
Minimum Integration Time	30e@20 °C, high gain mode
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	$\leq$ 240mW
Signal Output Swing	1.8 $\pm$ 0.1V
Effective Data Output Bit Depth	/
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~+60°C
Storage Environment Temperature	-55°C~+70°C

Applications



Vision Enhancement



Machine Vision



Photovoltaic Inspection



Space Communication

Company Profile

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