

Pr-GE

SWIR Camera

Pr-GE SWIR Camera is a compact and versatile SWIR module. It adopts high-sensitive InGaAs focal plane detector with built-in adaptive image processing algorithm, supporting high frame rate operation and ROI windowing. While supporting USB3.0, CameraLink, and CVBS analog interface, active temperature control is also functioning. Pr-GE features low noise, low power consumption and multiple built-in functions, which can be widely used in vision enhancement, machine vision, photovoltaic inspection, plastic sorting, laser detection, etc.



Built-in Image
Processing Algorithm



USB3.0 or
Camera Link Output



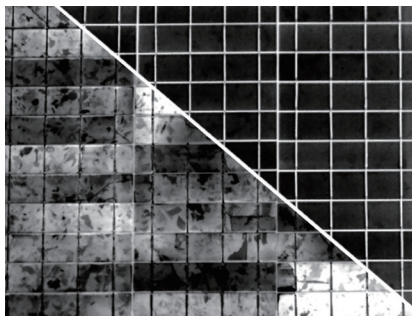
Low Noise and
Low Power



Region of Interest
(ROI)



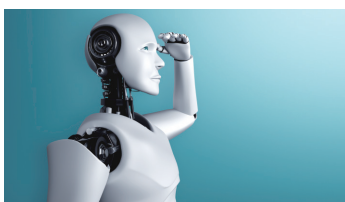
300Hz Full-Array
Frame Rate



Specifications

Product Model	PR-GE
Detector Type	InGaAs short-wave infrared focal plane detector
Spectral Response Range	0.9-1.7 μ m
Pixel Pitch	15 μ m
Resolution	640 $\times$ 512
Frame Rate	150fps(USB3.0)/300fps(Cameralink)
Effective Pixel Rate	$\geq$ 99.8%
Integration Type	Snapshot global shutter
Exposure Time Range	0.1ms~30ms
Cooled Mode	TEC 1
Output Data Depth	10bit/14bit(USB3.0)/12bit(Cameralink)
Readout Noise (Typical value)	30e@Gain0
Optional Gain	3-level
Dynamic Range	50dB(Gain0),62dB(Gain1),72dB(Gain2)
Average Pixel Dark Current	$\leq$ 80ke/s/pixel@ 25°C
On-board Image Processing	Non-uniformity correction, filtering, detail enhancement, contrast enhancement
Power Supply Range	7V~24V DC (12V DC recommended)
Typical Power Consumption @25°C	3.5W (maximum $\leq$ 5 W)
Digital Video	USB 3.0 or Cameralink, optional
Analog Video	PAL
Communication Interface	UART232
Optical Interface	C-Mount
Weight	245g $\pm$ 10g
Dimensions	55mm $\times$ 55mm $\times$ 60mm
Operating Case Temperature	-20°C~+55°C
Storage Case Temperature	-40°C~+70°C
Vibration	9.0g, random vibration, 3 axes
Shock	40g, 11 ms, sawtooth waveform, 3 axes/6 directions

Applications



Visual Enhancement



Machine Vision



Photovoltaic Inspection



Space Communication

Company Profile

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Version: PL202610V1



Official Website



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