

# 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



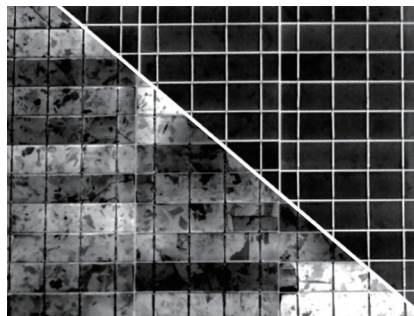
Low Noise and Low Power



Region of Interest (ROI)



300Hz Full-Array Frame Rate



## Specifications

Technical Specifications	Pr-GE
Sensor Type	InGaAs PIN-Photodiode
Spectral Response Range	0.93μm~1.7μm
Quantum Efficiency	≥70% @1064nm/1550nm
Optical Fill Factor	100%
Pixel Pitch	15μm
Active Pixels	640×512
Pixel Operability	≥ 99.8%
Exposure Type	Snapshot
Max Frame Rate	150fps (USB)/300fps(CL)
Depth of Output Data	10bit /14bit(USB)/12bit(CL)
Minimum Integral Time	10μs
Noise (RMS,typical)	30e @100μs, Gain0
Dynamic Range	50dB(Gain0), 62dB(Gain1), 72dB(Gain2)
Mean Pixel Dark Current	≤ 80ke/s@20°C
Power Supply	12V DC ±0.5V
Power Consumption	≤5W
Command and Control Interface	UART232
Analog Video Format	PAL
Digital Video Interface	USB3.0 or Camera Link, optional
Optical Lens Mount	C-Mount
Module Weight	245±10g
Dimensions	55×55×60mm <sup>3</sup>
Operating Case Temperature	-20°C~+55°C
Storage Temperature	-40°C~+70°C

■ The information is for illustrative purposes only. The pictures and technical specifications are subject to changes without notice.

## Application Scenarios



## 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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