SWIR SYSTEMS

Component Product SiIeries

S5640

High Resolution Visible SWIR Camera
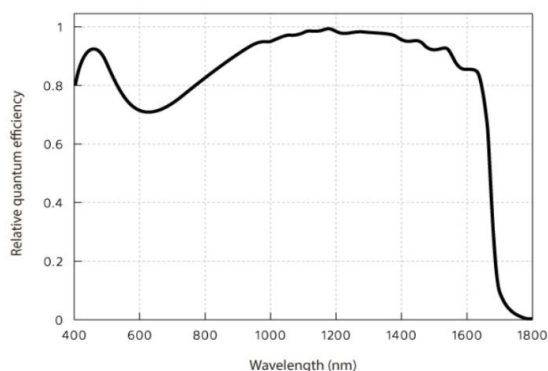
S5640 adopts the latest SXGA InGaAs detector, 640 × 512 high resolutions, 5 µm pixel spacing, It has high sensitivity, at the 0.4 µm~1.7 µm band. The camera has low dark-current and high dynamic range, and accurate TEC temperature control further narrows the readout noise. The whole machine has compact structure, stable performance, small volume, low power consumption and strong environmental adaptability. It can be commonly used in photoelectric mission load, scientific research, security monitoring, machine vision, industrial detection, system integration and other fields.
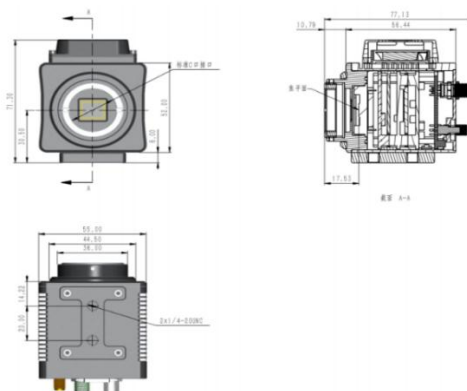
Product Features

- Resolution: 640 ×512
- Small pixel spacing, only 5um
- Wide spectral response, 0.4 µm~1.7 µm
- 25Hz/50Hz/100Hz/130Hz
- Window mode, frame rate can be further improved
- During the day ~ low illumination imaging, through fog, haze, dust imaging
- Global exposure mode, AGC, auto exposure, real-time image correction and enhancement
- Window mode, frame rate can be further improved
- Digital video output and analog video output are optional
- USB / SDI / GigE / Cameralink multiple interface modes
- C port, provide other optical interface conversion
- Power on self check, fault report automatically

Spectral Effect

Dimensions

Performance Index

Detector		Interface	
Detector type	InGaAs FPA	Camera control	RS422
Spectral band	0.4μm~1.7μm	External trigger	TTL
Resolution	640×512	Digital output	USB/CameraLink
Pixel pitch	5μm	Analog output	PAL
Quantum efficiency	>75%@0.4μm~1.7μm	**Power Requirements**	
Dynamic Range	57dB	Power supply	DC 12±1V
Noise	200e⁻	Power dissipation	≤5W(TEC off)
Image		**Environmental Adaptability**	
Frame rate	50Hz	Operating temperature	-20℃~+60℃
Exposure time	20us~19ms	Storage temperature	-20℃~+60℃
ADC	8bit/10bit/12bit	**Physical Properties**	
On-board image processing	Auto exposure control	Weight	≤310g
	Automatic gain control	Dimensions	77mm×55mm×73mm
	Non-uniformity corrections （offset&gain@Dark）; Failed pixel replacement; Automatic contrast enhancement（adjustable）		