

# ATTAIN SWIR SYSTEMS

## Component Product Series

### S5128

### High Resolution Visible SWIR Camera

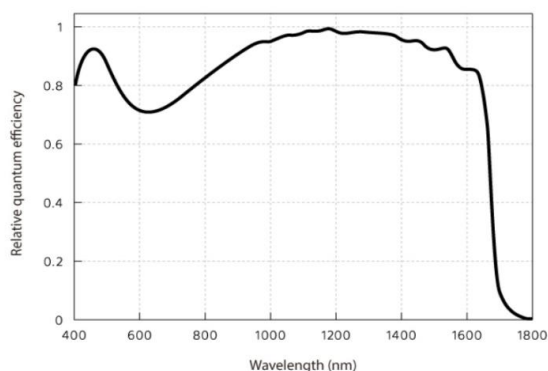
S5128 adopts the latest SXGA InGaAs detector,  $1280 \times 1024$  high resolutions,  $5 \mu\text{m}$  pixel spacing, It has high sensitivity, at the  $0.4 \mu\text{m} \sim 1.7 \mu\text{m}$  band. The camera has low dark-current and high dynamic range, and accurate TEC temperature control further narrows 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.



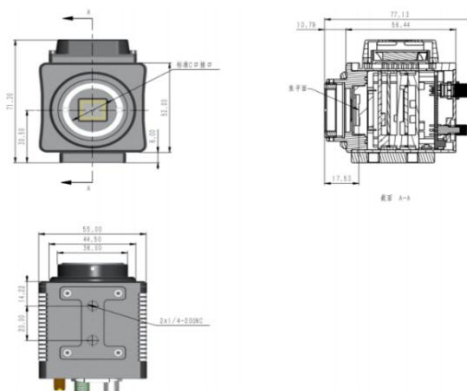
### Product Features

- Resolution:  $1280 \times 1024$
- Small pixel spacing, only  $5 \mu\text{m}$
- Wide spectral response,  $0.4 \mu\text{m} \sim 1.7 \mu\text{m}$
- 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	0.4 $\mu$ m~1.7 $\mu$ m	External trigger	TTL
Resolution	1280 $\times$ 1024	Digital output	USB/CameraLink
Pixel pitch	5 $\mu$ m	Analog output	PAL
Quantum efficiency	>75%@0.4 $\mu$ m~1.7 $\mu$ m	Power Requirements	
Dynamic Range	57dB	Power supply	DC 12 $\pm$ 1V
Noise	200e <sup>-</sup>	Power dissipation	$\leq$ 5W(TEC off)
Image		Environmental Adaptability	
Frame rate	50Hz	Operating temperature	-20 $^{\circ}$ C~+60 $^{\circ}$ C
Exposure time	20us~19ms	Storage temperature	-20 $^{\circ}$ C~+60 $^{\circ}$ C
ADC	8bit/10bit/12bit	Physical Properties	
On-board image processing	Auto exposure control	Weight	$\leq$ 310g
	Automatic gain control	Dimensions	77mm $\times$ 55mm $\times$ 73mm
	Non-uniformity corrections ( offset&gain@Dark ) ; Failed pixel replacement; Automatic contrast enhancement (adjustable)		