

Component Product Series

OPT-640SC

High Performance SWIR Movement

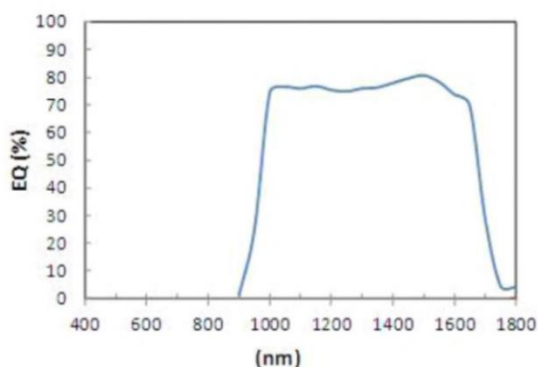
OPT-640SC adopts the latest VGA InGaAs detector technology, 640×512 high resolution, 15um pixel pitch, and extremely high sensitivity in the 0.9um~1.7um band. The movement has very low dark current and high dynamic range, and precise TEC temperature control further reduces readout noise. The whole machine has compact structure, stable performance, small size, low power consumption and strong environmental adaptability. It can be widely used in photoelectric task load, scientific research, security monitoring, machine vision, industrial inspection, system integration and other fields.

Product Features

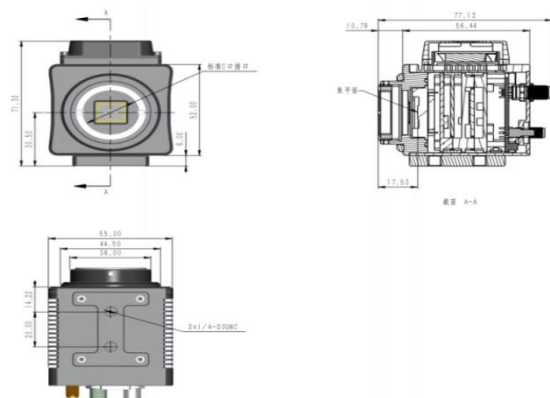
- 640×512 resolution, 15um pixel pitch;;
- 25Hz/50Hz/100Hz/300Hz;
- High Sensitivity: 0.9um~1.7um;
- Daytime ~ low illumination imaging, through fog, haze, sand and dust imaging;
- Global exposure mode, AGC, automatic exposure, real-time image correction and enhancement;
- Window mode, frame rate can be further improved;
- Optional digital video output and analog video output;
- USB/SDI/GigE/Cameralink multiple interface methods;
- C, Provide other optical interface conversion;
- Power-on self-check, automatic fault report。



Spectral Effect



Dimensions



Performance Index

Detector		Interface	
Detector type	InGaAsFPA	Camera control	RS422
Spectral band	0.9um~1.7um	External trigger	TTL
Resolution	640×512	Digital output	USB/CameraLink
Pixel pitch	15um	Analog output	PAL
Quantum efficiency	>70% @ 1.0~1.6um	Power Requirements	
Dynamic Range	High gain: 54dB; Low gain: 68dB	Power supply	DC 12V ±3V
Noise	30e	Power dissipation	≤5W (TEC off)
Image		Environmental Adaptability	
Frame rate	50Hz	Operating temperature	-20℃~+60℃
Exposure time	20us~19ms	Storage temperature	-20℃~+60℃
ADC	14bit	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)		