

SWIR SYSTEMS

Component Product Series

S1128

Near-Infrared Broadband Camera

S1128 is a near-infrared wide spectrum camera. Using advanced extremely low-illuminance detection technology, it can use atmospheric glow imaging under extremely weak light environment, and has extremely high sensitivity in the near infrared band ($QE \geq 50\%$ at 700~1000nm).

Compared with visible light, low-light level and thermal imaging cameras, it has the following advantages: it can quickly detect and identify targets, can penetrate smoke, haze, and sand, and can image day and night; it can penetrate colored glass, car windows, sunglasses, and some high Molecular plastics for observation; it can be concealed for reconnaissance, the illumination beam will not be detected by human eyes and traditional equipment such as visible light cameras, low-light night vision cameras and thermal imaging cameras; it can easily and quickly detect laser targets, and is widely used in night covert reconnaissance and evidence collection. Day and night surveillance, target recognition in harsh environments, fog-through imaging, camouflage recognition, low light environment imaging, day and night imaging, search and rescue, etc.



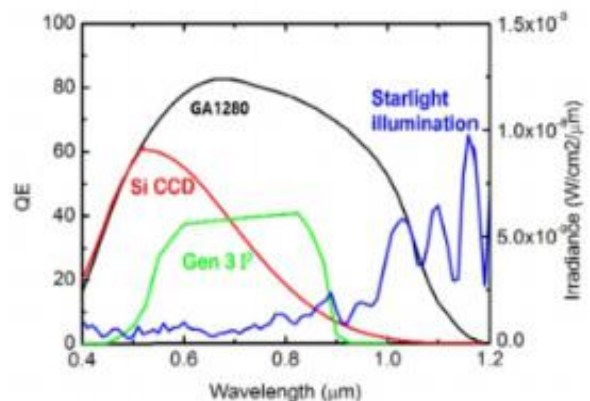
Product Features

- Low-light imaging technology;
- Resolution:1280x1024;
- Lowest illumination: 3×10^{-4} Lux;
- 2D and 3D noise reduction;
- Auto white balance / Auto exposure;
- Uncompressed raw data output;
- Communication control, control RS422
- Provide multiple digital interfaces of USB/CameraLink/HD-SDI.

Product Application

- Night vision
- Persistent surveillance around the clock
- Weapon targeting system
- Airborne ISR (intelligence, surveillance, reconnaissance);
- Laser spot detection;
- Iris recognition
- Fluorescence imaging
- Silicon ingot inspection

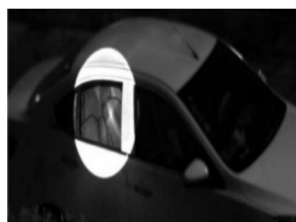
Spectral Effect



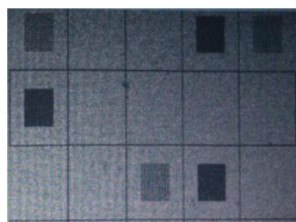
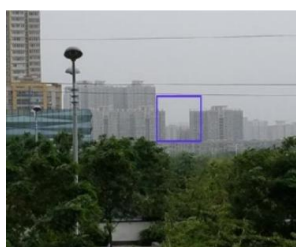
Performance Index

Spectral response	400nm ~1200nm	Detector Interface	
pixel	1280×1024	Digital output	USB/CameraLink/HD-SDI
Image spacing	10μm	Camera control	RS422
Min. sensitivity @F12	3×10 ⁻⁴ Lux	Lens mount	C
Image		Power Supply	
Frame rate	25Hz/@SXGA, 60Hz/@720p	Power input	DC 12V
Exposure	20us~25ms	Power dissipation	≤3.8W
Dynamic Range	≥80dB	Environmental Adaptability	
On-board image processing	Blind element replacement、 Auto exposure、 Auto gain control、 Auto contrast enhancement (adjustable) 、 Image noise reduction image enhancement	Operating temperature	-20℃~+60℃
		Storage temperature	-40℃~+70℃
		Physical Properties	
		Weight	170g
		Size	47mm×47mm×63mm

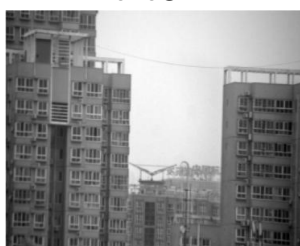
Dimensions



Window night vision



0.001Lux Low-light imaging@60Hz



Remote penetrate fog (2km)

Dimensions

