

GHOPTO SWIR CAMERAS

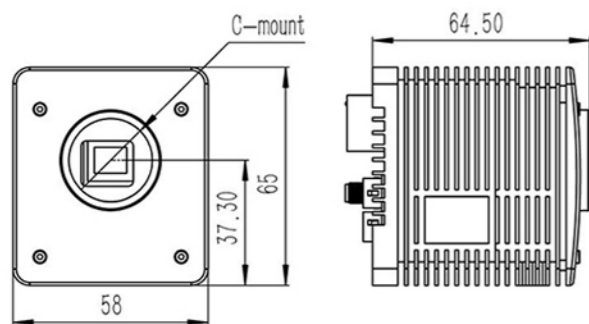
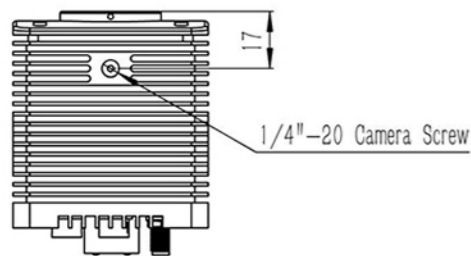
GH-SW640-GigE



GHOPTO SWIR camera is based on an in-house developed InGaAs detector with multiple resolutions. The compact GH-SW640-GigE meets requirements of high sensitivity in the SWIR range from 900nm to 1700nm and with accompanied by extended wavelength from 400nm to 1700nm options. The camera comes with PAL output and GigE vision interface, supporting 14-bit data transfer and adjustable exposure time. The Short-Wave Infrared (SWIR) camera offers unique capabilities for various applications in Industrial inspections as nondestructive test, Si wafer inspection, semiconductor circuit detection, laser beam profiling and process monitoring.

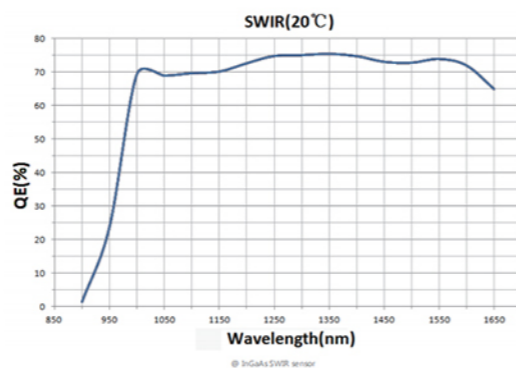
FEATURES

- ▶ High-performance Gige network InGaAs camera
- ▶ High dynamic range and high frame rate
- ▶ Automatic on-board image processing
- ▶ Region of interest (ROI) control
- ▶ Single point correction of electronic shutter
- ▶ Optional screen windowing function



* GigE camera (weight: 220g)

▲ GH-SW640-GigE Camera structure



▲ Quantum Efficiency

SPECIFICATION

TYPE	GH-SW640-GigE
Array Type	InGaAs
FPA Format	640 x 512
Spectral Response	0.9 ~ 1.7 μm / 0.4 ~ 1.7 μm (optional)
Pixel Pitch	15 μm
Active Area	9.6 mm x 7.68 mm
Quantum Efficiency	> 70% (1.0 ~ 1.6 μm)
Frame Rate	100 Hz
Integration Type	snapshot
Integration Time Range	50 μs ~ 20 ms /100Hz maximum integral:9ms
On-board Image Processing	One/two-point correction、bad pixel replacement、image denoising、image smoothing, controllable shutter compensation
Operability	> 99.5%
Dynamic Range	76 dB (linear mode)
Charge handing capacity	1.7 x 10 ⁴ e ⁻ (@HG , 1.8V)
ADC	14 bit
Analog Output	PAL、SMA
Digital Output	GigE
Image Acquisition	GUI / SDK
Trigger	Trigger RS485 (optional)
Power Input	DC 12V
Power Consumption	< 4W (no TEC)
Lens Mount	C-Mount
Operating Temperature	- 20 °C ~ + 50 °C / - 40 °C ~ + 60 °C (optional)
Storage Temperature	- 40 °C ~ + 80 °C

APPLICATIONS

- Solar Cell Inspection
- Laser Beam Profiling
- Surveillance and Security
- Plastics Sorting | Airborne Remote Sensing
- Others Medical Imaging | Hyperspectral Imaging