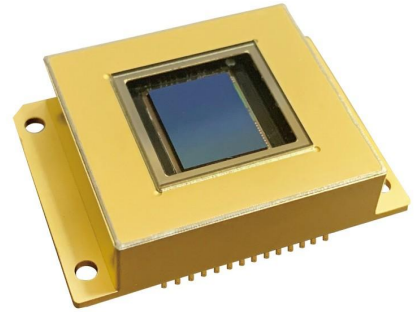


SWIR SENSOR

Vis-SWIR & SWIR FPA 15 μm

GHOPTO InGaAs technology provides outstanding performances in terms of sensitivity, noise, dark current and operability. GHOPTO Visible-SWIR FPA is new generation of 640, 15 μm SWIR detector, which has extended waveband: 0.4 μm to 1.7 μm with high resolution and high sensitivity. The 15 μm pitch InGaAs detector is well-adapted to a large range of applications such as surveillance, airborne gimbals and various industrial and scientific applications.



Type	GH-VSW640-F15c	GH-SW640-F15c
FPA Format	640 x 512	640 x 512
Pixel Pitch	15 μm	15 μm
Spectral Response	0.4 ~ 1.7 μm	0.9 ~ 1.7 μm
Active Area	9.6 mm x 7.68 mm	
Fill Factor	100%	
Quantum Efficiency	$\geq 65\%$ (1.0 ~ 1.6 μm)	
Detectivity D*	$\geq 5 \times 10^{12} \text{cm Hz}^{1/2} \text{W}^{-1}$	
Noise Electronics	50 e ⁻ (@HG, readout noise)	
Full-well Capacity	1.8 x 10 ⁶ e ⁻ (@LG, 1.8V)	
	7.3 x 10 ⁴ e ⁻ (@MG, 1.8V)	
	1.7 x 10 ⁴ e ⁻ (@HG, 1.8V)	
Dynamic Range	76 dB (linear mode)	
	120 dB (log mode)	
Non-uniformity	<3 %	
TEC	TEC 1	
Windowing	support	
Operability	>99.5 %	
Exposure time	37 μs ~ frame time	
Maximum full frame rate	240 fps /340 fps	
Readout modes	ITR, IWR, NDRO, IMRO	
Operating temperature	- 40 ~ 60 °C	
Storage temperature	- 40 ~ 70 °C	
Weight(no lens)	< 30 g	