



SWIR CAMERAS

Vis-SWIR CAMERA

GH-SW033-U3

GH-SW130-U3



FEATURES

GH-SW033-U3 | GH-SW130-U3

- Wide Spectral Response
- TE Cooler
- 5μm Pixel Pitch
- External IO Trigger Control Supported
- Global Shutter

Basic Specs

Model type	GH-SW033-U3		GH-SW130-U3	
Sensor	Sony IMX991		Sony IMX990	
Resolution	640 x 512		1280 x 1024	
Active area	3.2mm x 2.56mm		6.4mm x 5.12mm	
Frame rate	137fps@640 x 512 258fps@320 x 256	257.8fps@640 x 512 486.1fps@320 x 256	70fps@1280 x 1024 135fps@640 x 512	132fps@1280 x 1024 253fps@640 x 512
ADC	12bit	8bit	12bit	8bit
Conversion gain	42.29e/ADU		44.3e/ADU	
Dynamic range	59.7dB		58.7dB	
Readout noise	174.99e-		211e-	
Full well charge	173.23ke-		181.6ke-	
Max SNR	52.39dB		52.6dB	
Dark current	172.39e-/s		383e-/s(0°C) 510e-/s(10°C) 638e-/s(20°C)	
Cooling temp	25°C below ambient temperature		25 ~ 30°C below ambient temperature	

Key Specs

Spectral range	0.4μm ~ 1.7μm	Pixel format	Mono8 / Mono12
Pixel pitch	5μm	Power consumption	<2.1W (uncooled) / <25W (cooled)
DDR3	512MB (4Gb)	Humidity	20% ~ 80% No Condensation
Sensitivity	121mV	Filter	400-1800nm (Standard) / 1030-1800nm (Optional)
Exposure time range	50μs ~ 60s	Dimensions	80mm x 80mm x 45.5mm
Gain range	1x ~ 15x	Lens mount	C-Mount
Shutter mode	Global Shutter	Software	SDK/ ToupView
Binning	Software 2x2, 3x3, 4x4	Weight	384.1g
Data interface	USB3.0	Certificate	CE, FCC
Operating system	Win32/ WinRT/ Linux/ macOS/ Android		
Power supply	USB3.0 interface power supply / 12V power adapter power supply		
Digital I/O	1 optical-coupling isolated input, 1 optical-coupling isolated output, 2 non-isolated input and output		
Temperature	Operating Temp 20°C~ 60°C ,Storage Temp -40°C~ 85°C		

Technical data are subject to change without notice