

## SWIR Series SenSWIR InGaAs Camera

VCI-A3UT+SWIR Series | USB3.0 | Cooled Industrial Area Scan Camera Using SenSWIR InGaAs

- 1、 Sony Exmor back-illuminated CMOS sensor;
- 2、 Two-step noise reduction technology;
- 3、 Ultra-high sensitivity and low noise;
- 4、 USB3.0(compatible with USB2.0 protocol) / GigE data transmission interface ;
- 5、 Provides advanced video and image processing application software ToupView, compatible with Windows/Linux/OSX multi-platform SDK, support native C/C++, C#/VB.Net, DirectShow, Twain API;
- 6、 Supports external triggering, digital I/O and free-running modes;
- 7、 Supports ROI, flip, bit-depth switching and other features.

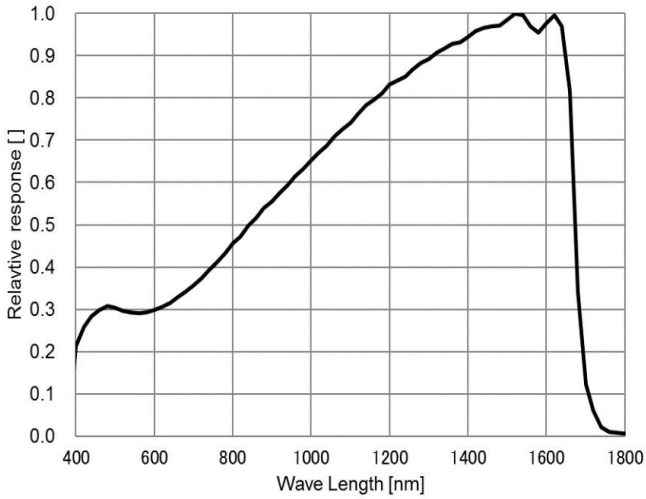
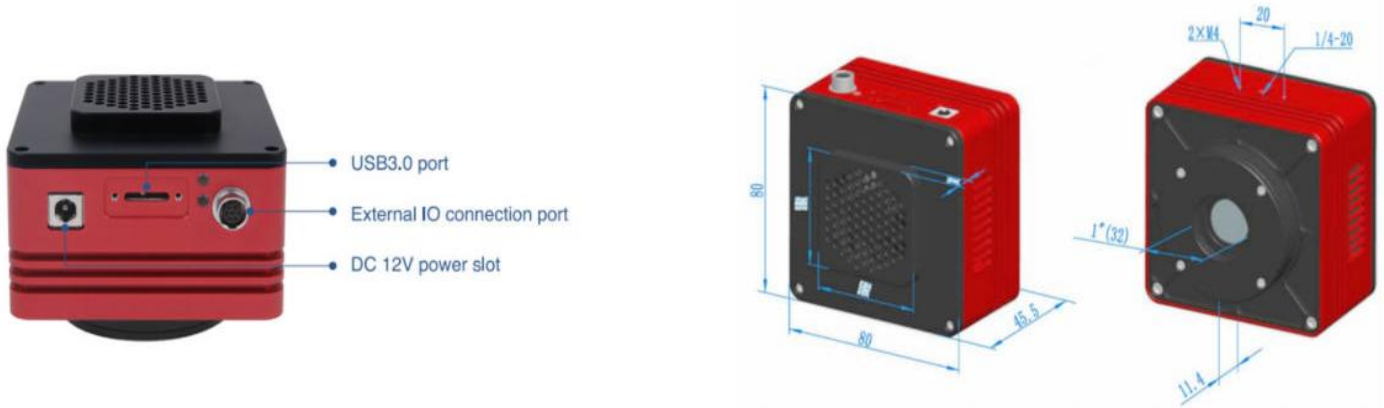


## Specification

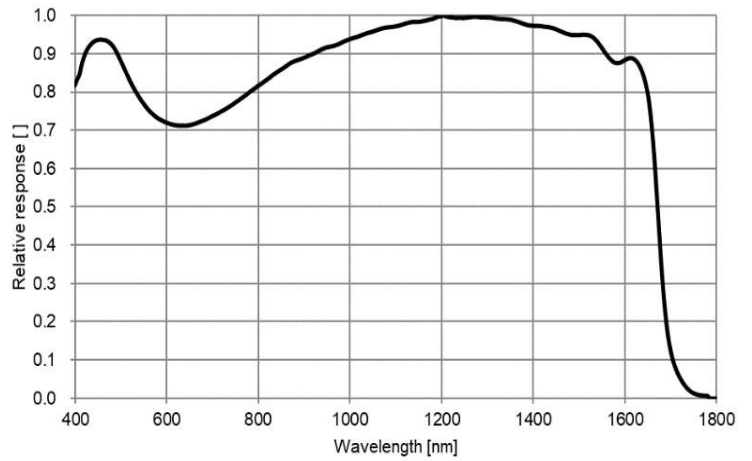
Model	VCI-A3UT500GM-SWIR-A	VCI-A3UT130GM-SWIR-A	VCI-A3UT033GM-SWIR-A
<b>Parameter</b>			
Sensor model	Sony IMX992-AABA-C	Sony IMX990-AABA-C	Sony IMX991-AABA-C
Sensor type	InGaAs	InGaAs	InGaAs
Spectral range	400nm-1800nm	400nm-1800nm	400nm-1800nm
pixel size	3.45 μm x 3.45 μm	5.0 μm x 5.0 μm	5.0 μm x 5.0 μm
Target size	1/1.4"	1/2"	1/4"
ADC	12 Bit / 8 Bit	12 Bit / 8 Bit	12 Bit / 8 Bit
Frame Rate & Resolution	8 Bit:71fps@2560x2048 252fps@1280x1024 12 Bit:35.5fps@2560x2048 135.7fps@1280x1024	12Bit:108fps@1280 x 1024 209fps@640 x 512 8Bit:200fps@1280 x 1024 392fps@640 x 512	12Bit:212fps@640 x 512 400fps@320 x 256 8Bit:400fps@640 x 512 753fps@320 x 256
Image Buffer	512MByte	512MByte	512MByte
Conversion gain	10.3e/ADU(HCG)17.29e/ADU(LCG)	44.3e/ADU	42.29e/ADU
Conversion gain	51.36dB(HCG)51.47dB(LCG)	58.7dB	59.7dB
Read noise	111.88e(HCG)186.61e(LCG)	211e	176.7e
Full well charge	41.39ke(HCG)69.92ke(LCG)	181.6ke	173.23ke
Maximum SNR	46.17dB(HCG)48.45dB(LCG)	52.6dB	52.39dB
Sensitivity	121mV	121mV	121mV
Dark current	638e/s(20°C)	383e/s(0°C) 510e/s(10°C) 638e/s(20°C)	383e/s(0°C) 510e/s(10°C) 638e/s(20°C)
Gain range	1x-15x	1x-15x	1x-15x
Exposure time range	15μs-60sec	15μs-60sec	15μs-60sec
Shutter mode	Global shutter	Global shutter	Global shutter
Binning	Software2x2, 3x3, 4x4	Software2x2, 3x3, 4x4	Software2x2, 3x3, 4x4
Data interface	USB3.0	USB3.0	USB3.0
Digital I/O	1 optocoupler isolated input, 1 optocoupler isolated output, two non-isolated input and output		
Data Format	8bit / 12bit	8bit / 12bit	8bit / 12bit
Cooling temperature	25°C below ambient temperature		
Optical filter	400-1800nm(default); 1030-1800nm(optional)		
CRA	2.35 Deg		
<b>Generalparameters</b>			
Power supply	Power with USB3.0 or 12V Power adapter		
Power consumption	<2.1W(without cooling) / <25W(cooling)		

Temperature	Working temperature -20~60°C, storage temperature -40~85°C
Humidity	20%-80% , non-condensing
Size	80mmx80mmx45.5mm
Weight	<390g
Lens mount	C-mount interface
Software	SDK
Operating system	Win32/WinRT/Linux/macOS/Android
Certification	CE, FCC

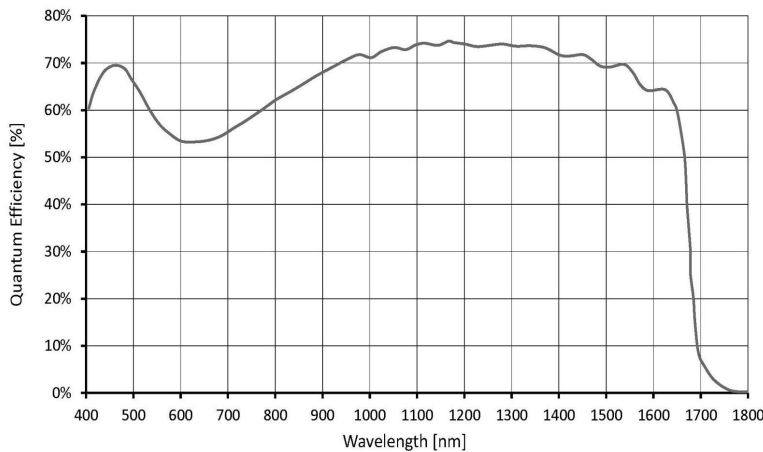
### Camera Dimensions



SWIR spectral response curve



SWIR relative quantum efficiency



SWIR absolute quantum efficiency