

SWIR Series SenSWIR InGaAs Camera

VCI-A1GT+SWIR Series | GigE | Cooled Industrial Area Scan Camera Using SenSWIR InGaAs

- 1、SONY SenSWIR InGaAs sensor
- 2、Built-in TEC or External TEC cooling chip
- 3、Precise temperature control, the temperature difference can reach 10-25 degrees Celsius
- 4、Spectral response range: 400nm-1800nm
- 5、5um pixel size
- 6、Global shutter
- 7、Support interface: USB3 / GigE / MIPI(developing) / CameraLink(developing)
- 8、12-bit ADC
- 9、4Gb memory
- 10、Support external IO trigger control
- 11、High framerate exceeding official parameters



Specification

Model Parameter	VCI-A1GT500GM-SWIR-A	VCI-A1GT130GM-SWIR-A	VCI-A1GT033GM-SWIR-A
Sensor model	Sony IMX992-AABJ-C	Sony IMX990-AABJ-C	Sony IMX991-AABJ-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: 22fps@2560x2048 88fps@1280x1024 12 Bit: 11fps@2560x2048 44fps@1280x1024	12Bit: 45fps@1280 x 1024 135fps@640 x 512 8Bit: 90fps@1280 x 1024 253fps@640 x 512	12Bit: 137.1fps@640 x 512 258.6fps@320 x 256 8Bit: 257.8fps@640 x 512 486.1fps@320 x 256
Image Buffer	512MByte	512MByte	512MByte
Conversion gain	43.0e/ADU	44.3e/ADU	42.29e/ADU
Conversion gain	59.6dB	58.7dB	59.6dB
Read noise	178.8e	211e	176.7e
Full well charge	176.2ke	181.6ke	173.23ke
Maximum SNR	52.5dB	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	Software 2x2, 3x3, 4x4	Software 2x2, 3x3, 4x4	Software 2x2, 3x3, 4x4
Data interface	GigE	GigE	GigE
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	25°C below ambient temperature	25°C below ambient temperature
Optical filter	400-1800nm(default); 1030-1800nm(optional)	400-1800nm(default); 1030-1800nm(optional)	400-1800nm(default); 1030-1800nm(optional)

CRA	2.35 Deg	2.35 Deg	2.35 Deg
Generalparameters			
Power supply	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	80mm×80mm×45.5mm		
Weight	<390g		
Lens mount	C-mount interface		
Software	SDK		
Operating system	Win32/WinRT/Linux/macOS/Android		
Certification	CE, FCC		

Camera Dimensions

