EHD-SWIR331 series CL camera

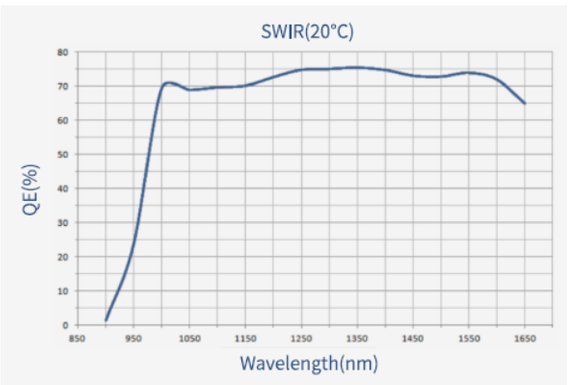
- 726FPS high frame rate
- InGaAs SWIR Detector
- 640 x 512
- 15um pixel size
- 900nm-1700nm
- Global shutter
- Built-in TEC refrigeration chip, the temperature difference can reach 40 degrees Celsius below the ambient temperature
- PID precise temperature control, the fluctuation is less than 0.3 degrees
- CameraLink Full / USB3 (under development) / 10GigE (under development)
- 12-bit output (14-bit ADC)
- Multiple working modes: video mode/soft trigger mode/external trigger mode
- There are 100% domestically produced device versions or high-performance versions
- Support field update firmware
- Accept OEM custom development

Product application

EHD-SWIR331 Short-Wavelength Infrared Camera is a C-mount short-wave infrared cooling camera using a 640 x 512 InGaAs image sensor, which have Cameralink / USB3 (under development) / 10GigE (under development) and other data transmission methods. It has the advantages of 900- 1700nm short-wave infra red wide spectral response, 330,000 resolution, high quantum efficiency and low noise.

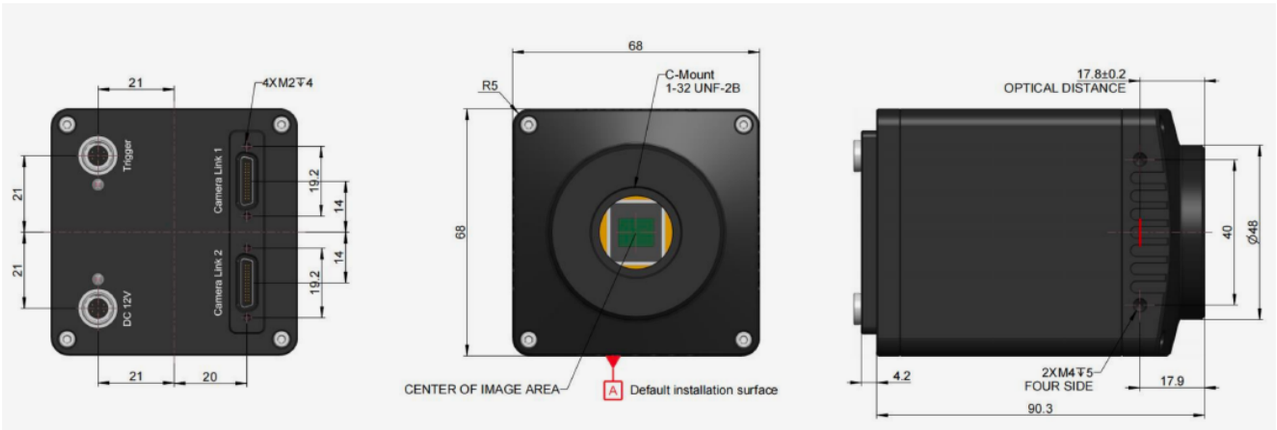
EHD-SWIR331 Short-Wavelength Infra red Camera can bewidely used in short-wave infra red imaging,spectral imaging, monitoring (night vision), semiconductor detection, medicine and biology, optical fiber communication, astronomy, high temperature imaging, humidity distribution imaging and other applications.

Sensor Quantum Efficiency



Camera Interface

Camera Appearance Dimensions



Specifications

Model / Parameter	EHD-SWIR331-CL500	EHD-SWIR331-CL700
	330,000 pixels 3/4 "InGaAs CameraLink Camera	
Sensormodel	FPA	FPA
Sensortype	lnGaAs CMOS image sensor	lnGaAs CMOS image sensor
Spectral range	900nm-1700nm	900nm-1700nm 15μmx15
pixelsize	15μm x 15 μm	μm
Target size	3/4"	3/4"
ADC	12-bit output (14-bit ADC)	12-bit output (14-bit ADC)
Frame Rate&Resolution	533fps@640 x 512	726fps@640 x 512
Memory	512MB	512MB
QE	75%@1350nm	75%@1350nm
Conversion gain	HG:106uV/e-(1.5fF) MG:20uV/e-(8.0fF) LG:0.82uV/e-(195fF)	HG:106uV/e-(1.5fF) MG:20uV/e-(8.0fF) LG:0.82uV/e-(195fF)
Dynamic Range	TBD	TBD
Read noise	18e-(HG CDS mode) 60e-(MG CDS mode) 500e- (LG CDS mode)	18e-(HG CDS mode) 60e-(MG CDS mode) 500e- (LG CDS mode)
Full weil charge	HG:17Ke- MG:90Ke-	HG:17Ke- MG:90Ke-
Maximum SNR	LG:2.2Me-TBD	LG:2.2Me-TBD
Dark cu rrent	30fA@0.1 V&18°C	30fA@0.1 V&18°C 23.81us~1s
Exposure time range	31.25us~1s	Global shutter
Shutter mode	Global shutter	Cameralink Full
Data interface	Cameralink Full	1optocoupler isolated input,
Digital 1/0	1optocoupler isolated input, 2non-isolated input and output ports	2non-isolated input and output ports
Data Format	Mono 12	Mono 12
Cooling temp difference	Below room temperature 40 degrees Celsius	Below room temperature 40 degrees Celsius
	General parameters	
Power supply Power	DC12V power supply	
consumption	8.4W (TEC OFF)/ <16W (TEC ON)	
Temperature	Working temperature -30 ~60 °C, storage temperature -40 ~85 °C	
Humidity	20%-80%, non-condensing	
Size	68mmX68mmX90.3mm	
Weight	485g	
Lens mount	C-mount interface	
Software	Provide SDK development kit and CL View software based on Dalsa acquisition card	

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