

VCXG-14SWIR.XC

Gigabit Ethernet, 1.3 Megapixel, Monochrome

Article number: 11706164

Overview

- 1296 x 1032 px
- Sony IMX990
- 1/2" CMOS
- 92 fps
- Gigabit Ethernet
- Cooling pipe integrated in the housing (optional use)
- Spectrum: Visible + SWIR (400–1700 nm)

ATTENTION: This product is subject to statutory export control regulations and may require written information on intended end use and final destination! Dual Use Classification ECCN/AL: 6A003B



Picture similar



Technical data

Sensor information

Sensor	Sony IMX990
Mono/Color	SWIR
Sensor type	1/2" CMOS
Shutter type	Global shutter
Resolution	1296 × 1032 px
Pixel size	5 × 5 µm
Exposure time	0.001 ... 60000 ms

Data quality (EMVA 1288 typical)

Dark noise	300 e-
Saturation capacity	140000 e-
Dynamic range	57 dB
Signal-to-noise ratio	51 dB
Quantum efficiency	70 % @ 536 nm

Acquisition formats

Image formats, interface frame rate max.	Full Frame, 1296 × 1032 px, max. 92 fps Binning 2×2, 648 × 516 px, max. 97 fps Binning 2×1, 648 × 1032 px, max. 97 fps Binning 1×2, 1296 × 516 px, max. 97 fps
Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 1296 × 1032 px, max. 97 fps
Pixel formats	Mono8 Mono10 Mono12 Mono12 Packed

Image preprocessing

Analog controls	Gain (0 ... 48 dB) Offset (0 ... 255 LSB 12 Bit)
Color models	Mono

Camera features

Basic Functions	Exposure Gain Trigger / Exposure Active (Flash) Binning 2x2 Partial Scan Offset Free Running Mode (Live Image)
Auto Functions	Exposure Auto Gain Auto
Image Pre-processing	Image Flipping (X/Y) LUT / Gamma Defect Pixel Correction (static/list, dynamic/threshold)
Acquisition / Interface	Burst Mode Adjustable Framerate Short Exposure Time Enable Device Link Throughput Limit Internal Image Buffer
Synchronization	free running trigger
Trigger sources	Hardware Software ActionCommand
Trigger delay	0 ... 2 s, tracking and buffering of up to 256 trigger signals

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Camera features

Process Synchronization	Events Timer Trigger Delay Debouncer Counter Sequencer Trigger via Action CMD (GigE) Additional Output Modes (e.g. Trigger Ready) Chunk data inside transferred image Encoder support via Counter End trigger source
Additional Functions	User Set Integrated temperature sensor (InHouse and Sensor) Readable additional information (e.g. sensor information)
Calibration data	Camera calibration data (user defined storage for intrinsic / extrinsic camera parameters, and geometry distortion values) Customer data storage (128 bytes user defined)
Internal image buffer	115 MB 8 images (Trigger Mode) 1 image (Free Running Mode)

Interfaces and connectors

Data interface	Gigabit Ethernet, Transfer rate 1000 Mbits/sec, Fast Ethernet, Transfer Rate 100 Mbits/sec, Connector: 8P8C Modular Jack (RJ45), screwable TYPE090 (according to GigE Vision Mechanical Supplement)
Process interface	M8 / 8 pins (SACC-DSI-M8MS-8CON-M8-L180)
Power supply	via M8 / 8 pins

Mechanical data

Lens mount	C-mount
Width	36 mm
Height	36 mm
Depth	46.1 mm
Weight	≤ 110 g
Material	aluminum, baked varnish

Electrical data

Voltage supply range +Vs	12 ... 24 V DC (external power supply)
Power consumption	Approx. 2.1 W @ 12 VDC and 71 fps

Non-volatile memory

Flash memory size	128 kB
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Environmental conditions

Operating temperature	0 ... +65 ° @ T = measurement point
Storage temperature	-20 ... +70 °C
Humidity	10 ... 90 % (non-condensing)
Protection class	IP 40 (with mounted lens and cable)

Digital I/Os

Lines	1 input line 1 output line 2 general purpose lines
Output line sources	Off Exposure Active Timer1 Readout Active UserOutput 1-3 TriggerReady

Conformity

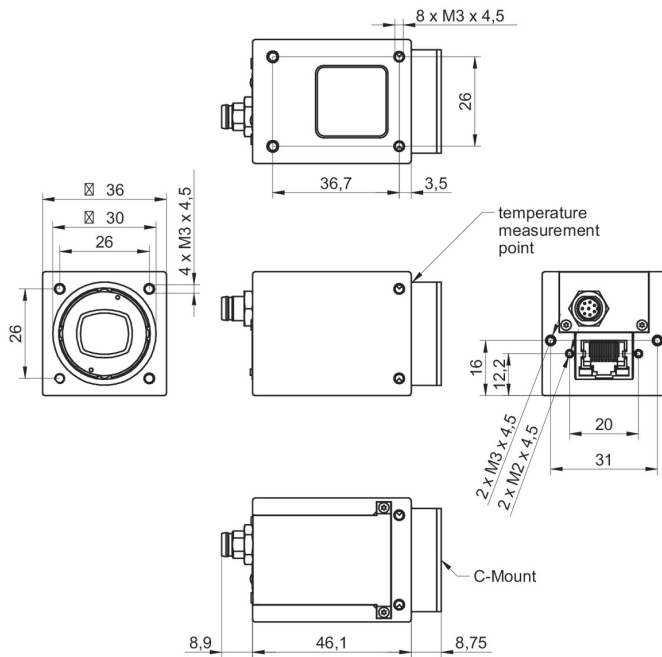
Conformity	CE RoHS UL recognized KC (R-R-BkR-VCXG-14SWIRXC)
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Dimension drawing



Principle

