

# VCXG-03SWIR.XC

Gigabit Ethernet, 0.3 Megapixel, Monochrome

Article number: 11727221

## Overview

- 656 x 520 px
- Sony IMX991
- 1/4" CMOS
- 237 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



GEN<i>i>CAM



## Technical data

### Sensor information

Sensor	Sony IMX991
Mono/Color	SWIR
Sensor type	1/4" CMOS
Shutter type	Global shutter
Resolution	656 × 520 px
Pixel size	5 × 5 μm
Exposure time	0.001 ... 60000 ms

### Data quality (EMVA 1288 typical)

Dark noise	260 e-
Saturation capacity	180000 e-
Dynamic range	57 dB
Signal-to-noise ratio	52.6 dB
Quantum efficiency	69 % @ 536 nm 66 % @ 631 nm

### Acquisition formats

Image formats, interface frame rate max.	Full Frame, 656 × 520 px, max. 237 fps Binning 2×2, 328 × 260 px, max. 237 fps Binning 2×1, 328 × 520 px, max. 237 fps Binning 1×2, 656 × 260 px, max. 237 fps
Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 656 × 520 px, max. 237 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

2024-12-02 The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

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## Technical data

### 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
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Additional Functions	User Set Integrated temperature sensor (InHouse and Sensor) Readable additional information (e.g. sensor information)
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Calibration data	Camera calibration data (user defined storage for intrinsic / extrinsic camera parameters, and geometry distortion values) Customer data storage (128 bytes user defined)
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### 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)
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Process interface	M8 / 8 pins (SACC-DSI-M8MS-8CON-M8-L180)
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Power supply	via M8 / 8 pins
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### 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 237 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

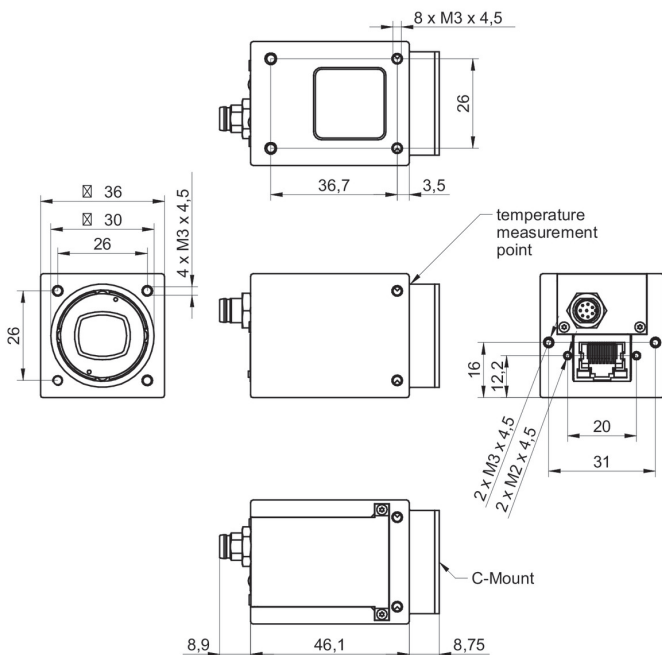
Lines	1 input line 1 output line 2 general purpose lines
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Output line sources	Off Exposure Active Timer1 Readout Active UserOutput 1-3 TriggerReady
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### Conformity

Conformity	CE UL recognized RoHS
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## Dimension drawing



## Principle

