

# V CXG-13M

Gigabit Ethernet, 1,3 Megapixel, Monochrome

Article number: 11164973

## Overview

- 1280 x 1024 px
- onsemi PYTHON1300
- 1/2" CMOS
- 94 fps
- Gigabit Ethernet



GEN<i>i>CAM



## Technical data

### Sensor information

Sensor	onsemi PYTHON1300
Mono/Color	Mono
Sensor type	1/2" CMOS
Shutter type	Global shutter
Resolution	1280 × 1024 px
Pixel size	4.8 × 4.8 μm
Exposure time	0.02 ... 1000 ms

### Data quality (EMVA 1288 typical)

Dark noise	20.3 e-
Saturation capacity	7491 e-
Dynamic range	51 dB
Signal-to-noise ratio	38.7 dB
Quantum efficiency	52.2 % @ 535 nm

### Acquisition formats

Image formats, interface frame rate max.	Full Frame, 1280 × 1024 px, max. 94 fps Binning 2×2, 640 × 512 px, max. 148 fps Binning 2×1, 640 × 1024 px, max. 148 fps Binning 1×2, 1280 × 512 px, max. 148 fps
Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 1280 × 1024 px, max. 146 fps
Pixel formats	Mono8 Mono10

### Image preprocessing

Analog controls	Gain (0 ... 12 dB) Offset (0 ... 63 LSB 10 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
Acquisition / Interface	Burst Mode Adjustable Framerate Device Link Throughput Limit Internal Image Buffer
Synchronization	free running trigger
Trigger sources	Hardware Software ActionCommand
Trigger delay	0 ... 2 sec, 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 Readable additional information (e.g. sensor information) Save Custom Data
Internal image buffer	60 MB 16 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 type
Process interface	M8 / 8 pins (SACC-DSI-M8MS-8CON-M8-L180)
Power supply	via M8 / 8 pins or Power over Ethernet (PoE)

### Mechanical data

Lens mount	C-mount
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### Mechanical data

Width	29 mm
Height	29 mm
Depth	49 mm
Weight	≤ 120 g
Material	zinc die casting, baked varnish (until 02-2020 nickel-chrome-plated), IP 40

### Electrical data

Voltage supply range +Vs	12 ... 24 V DC (external power supply) 36 ... 57 V DC (Power over Ethernet)
Power consumption	approx. 2,5 W @ 12 VDC and 94 fps approx. 3,0 W @ 48 VDC (PoE) and 94 fps

### Non-volatile memory

Flash memory size	128 kB
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### Environmental conditions

Operating temperature	0 ... +65 ° @ T = measurement point
Humidity	10 ... 90 % (non-condensing)
Protection class	IP 40

### Digital I/Os

Lines	1 input line 1 output line 2 general purpose lines
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### Conformity

Conformity	CE RoHS KC (MISP-REI-BKR-VCXG-13M) EAC
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## Dimension drawing

