

VCXG-201M.R.I

Gigabit Ethernet, 20 Megapixel, Monochrome

Article number: 11702883

Overview

- 5472 x 3648 px
- Sony IMX183
- 1" CMOS
- 6 fps
- Gigabit Ethernet



GEN*i*CAM



Technical data

Sensor information

Sensor	Sony IMX183
Mono/Color	Mono
Sensor type	1" CMOS
Shutter type	Rolling shutter Global reset shutter
Resolution	5472 × 3648 px
Pixel size	2.4 × 2.4 µm
Exposure time	0.115 ... 60000 ms

Data quality (EMVA 1288 typical)

Dark noise	3.05 e-
Saturation capacity	14662 e-
Dynamic range	71.8 dB
Signal-to-noise ratio	41.7 dB
Quantum efficiency	77.8 % @ 535 nm

Acquisition formats

Image formats, interface frame rate max.	Full Frame, 5472 × 3648 px, max. 6 fps Binning 2×2, 2736 × 1824 px, max. 9 fps Binning 2×1, 2736 × 3648 px, max. 6 fps Binning 1×2, 5472 × 1824 px, max. 9 fps
Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 5472 × 3648 px, max. 9 fps
Pixel formats	Mono8 Mono10 Mono12 Mono12 Packed

Image preprocessing

Analog controls	Gain (0 ... 20 dB) Offset (0 ... 255 LSB 12 Bit)
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Color models	Mono
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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	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	Trigger Delay
	Debouncer
Counter	Counter
	Trigger via Action CMD (GigE)
Additional Output Modes (e.g. Trigger Ready)	Additional Output Modes (e.g. Trigger Ready)
	PWM (PWM Duration / PWM Duty Cycle)
4 power outputs with up to 120 W (max. 48 V / 2.5 A)	4 power outputs with up to 120 W (max. 48 V / 2.5 A)
	Selectable Output format (e.g. Tri State, Push Pull)
Chunk data inside transferred image	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)	Readable additional information (e.g. sensor information)
	Save Custom Data
Internal image buffer	58 MB
	1 image (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: M12 / 8 pol x-coded, screwable type
Process interface	M12 / 12 pins a-coded (SACC-CI-M12MS-12CON-L180)
Power supply	via M12/8 pins x-coded or Power over Ethernet (PoE)

Mechanical data

Lens mount	C-mount
Width	40 mm
Height	40 mm

Mechanical data

Depth	50.8 mm
Weight	≤ 137 g
Material	aluminum, hard-anodized

Electrical data

Voltage supply range +Vs	12 ... 24 V DC (external power supply)
	36 ... 57 V DC (Power over Ethernet)
Power consumption	approx. 2,3 W @ 12 VDC and 6 fps
	approx. 3,0 W @ 48 VDC (PoE) and 6 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 (with mounted lens and cable)
	IP 54 (with mounted lens and cable)
	IP 65 (with mounted tube and cable)
	IP 67 (with mounted tube and cable)
	IP 69K (with stainless steel housing accessory)

Digital I/Os

Lines	4 input lines
	4 power output lines with pulse width modulation (PWM) (max. 48 V / max. 2,5 A)
Output line sources	Off
	Exposure Active
	Timer1
	Readout Active
	User0
	User1
	User2
	TriggerReady

Conformity

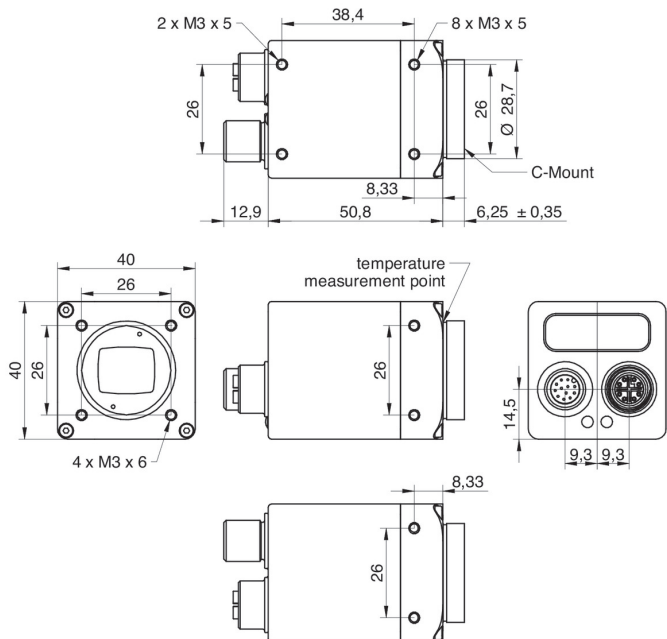
Conformity	CE RoHS
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Dimension drawing



Principle

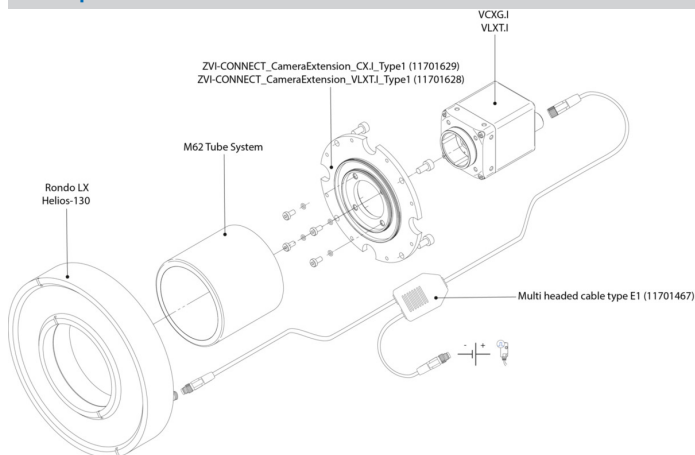
Optional accessories for protection class IP 65/67:



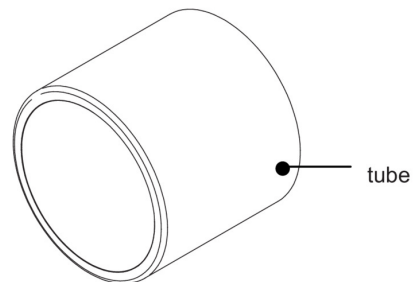
tube adapter

- hard-anodized, incl. sealing and screws
Ø 49,5 mm (VCXG.I 11185373)
Ø 65 mm (VCXG.I 11185377)
Ø 95 mm (VCXG.I 11704311)
Ø 65 mm (VLXT 11193125)
Ø 95 mm (VLXT.EF 11704315)

Principle



tube



- hard-anodized, cover glass PMMA
Ø 49,5 mm, Length 44 mm (11185370)
Ø 65 mm, Length 58 mm (11185374)
Ø 95 mm, length 70 mm (11704312)
- hard-anodized, tempered laminated safety glass
Ø 49,5 mm, Length 44 mm (11701124)
Ø 65 mm, Length 58 mm (11701125)

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Principle



distance ring

- hard-anodized, incl. sealing
- Ø 49,5 mm, Length 6 mm (11185372)
- Ø 49,5 mm, Length 12 mm (11185371)
- Ø 49,5 mm, Length 36 mm (11211571)

- Ø 65 mm, Length 6 mm (11185376)
- Ø 65 mm, Length 12 mm (11185375)
- Ø 65 mm, Length 36 mm (111988906)

- Ø 95 mm, length 6 mm (11704395)
- Ø 95 mm, length 12 mm (11704397)
- Ø 95 mm, length 36 mm (11704394)