

VLXT-90M.I.JP

Gigabit Ethernet, 8,8 Megapixel, Monochrome

Article number: 11701724

Overview

- 4096 × 2160 px
- Sony IMX255
- 1" CMOS
- 95 fps
- 10 GigE
- JPEG



GEN*i*CAM



Technical data

Sensor information

Sensor	Sony IMX255 Gen2
Mono/Color	Mono
Sensor type	1" CMOS
Shutter type	Global shutter
Resolution	4096 × 2160 px
Pixel size	3.45 × 3.45 µm
Exposure time	0.001 ... 60000 ms

Data quality (EMVA 1288 typical)

Dark noise	2.11 e-
Saturation capacity	9165 e-
Dynamic range	70.4 dB
Signal-to-noise ratio	39.6 dB
Quantum efficiency	64.4 % @ 536 nm

Acquisition formats

Image formats, interface frame rate max.	Full Frame, 4096 × 2160 px, max. 95 fps Binning 2×2, 2048 × 1080 px, max. 184 fps Binning 2×1, 2048 × 2160 px, max. 95 fps Binning 1×2, 4096 × 1080 px, max. 95 fps
Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 4096 × 2160 px, max. 95 fps
Pixel formats	Mono8 Mono10 Mono12 Mono12 Packed

Image preprocessing

Analog controls	Gain (0 ... 48 dB) Offset (0 ... 255 LSB 12 Bit)
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Color models	Mono
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Image processing	JPEG
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Camera features

Basic Functions	Exposure Gain / Color Gain Trigger / Exposure Active (Flash) Binning 2x2 Partial Scan Offset Free Running Mode (Live Image) Multi ROI
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Auto Functions	Exposure Auto Gain Auto
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Image Pre-processing	Image Flipping (X/Y) LUT / Gamma Shading Correction JPEG Image Compression Edge Sharpening Noise Reduction
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Acquisition / Interface	Burst Mode Adjustable Framerate Short Exposure Time Enable Device Link Throughput Limit Internal Image Buffer
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Synchronization	free running trigger
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Camera features

Trigger sources	Hardware Software ActionCommand
Trigger delay	0 ... 2 sec, tracking and buffering of up to 256 trigger signals
Process Synchronization	Events Timer Trigger Delay Debouncer Counter Sequencer Trigger via Action CMD (GigE) Action CMD Request ID Trigger ID inside Chunk Additional Output Modes (e.g. Trigger Ready) PWM (PWM Duration / PWM Duty Cycle) Selectable Output format (e.g. Tri State, Push Pull) Chunk data inside transferred image Encoder support via Counter End trigger source 4 power outputs with up to 120 W (max. 48 V / 2.5 A)
Time synchronization IEEE 1588	IEEE 1588 / Master and Slave function IEEE 1588 / Scheduled Action CMD IEEE 1588 / Synchronized Acquisition Framerate
Additional Functions	User Set Integrated temperature sensor Readable additional information (e.g. sensor information) Save Custom Data
Lens control	Corning liquid lens
Sequencer	Automated control for series of images using different sets of parameters
Sequencer parameter	Exposure time gain factor output line ROI Offset x ROI Offset y
Internal image buffer	1024 MB 117 images (Trigger Mode) 1 image (Free Running Mode)

Interfaces and connectors

Data interface	10 Gigabit Ethernet, Transfer rate 10000 Mbits/sec, Gigabit Ethernet, Transfer rate 1000 Mbits/sec, Fast Ethernet, Transfer rate 100 Mbits/sec, Connector: M12 / 8-pol x-coded (SACC-CI-M12FS-8CON-L180-10G)
Process interface	M12 / 12 pins a-coded (SACC-CI-M12MS-12CON-L180)
Power supply	via M12/12 pins a-coded

Mechanical data

Lens mount	C-mount
Width	60 mm
Height	60 mm
Depth	99.7 mm
Weight	≤ 485 g
Material	aluminum

Electrical data

Voltage supply range +Vs	19.2 ... 28.8 V DC (external power supply)
Power consumption	approx. 10.5 W @ 24 VDC and 95 fps

Non-volatile memory

Flash memory size	128 kB
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Environmental conditions

Operating temperature	0 ... +60 ° @ T = measurement point
Humidity	10 ... 90 % (non-condensing)
Protection class	IP 40 IP 54 (with mounted tube and cable) IP 65 (with mounted tube and cable) IP 67 (with mounted tube and cable)

Digital I/Os

Lines	2 input lines 4 power output lines with pulse width modulation (PWM) (max. 48 V / max. 2,5 A) RS232
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Conformity

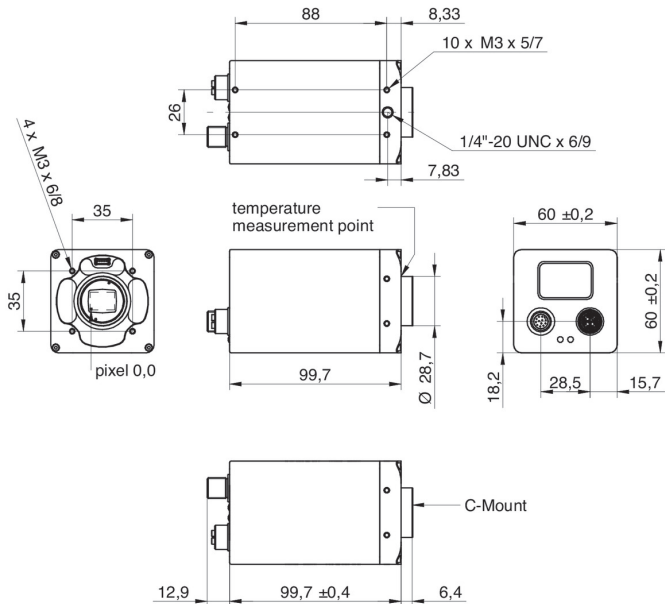
Conformity	CE RoHS EAC UL recognized
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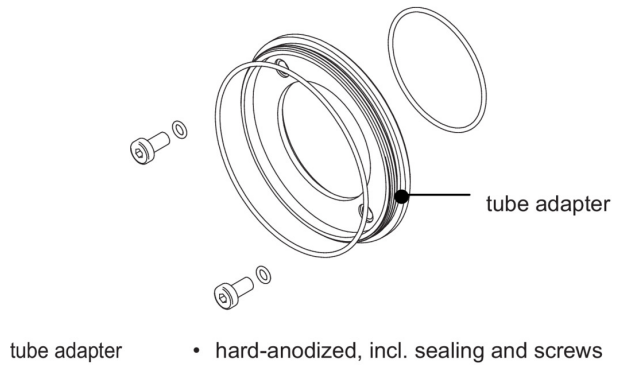
Article number: 11701724

Dimension drawing



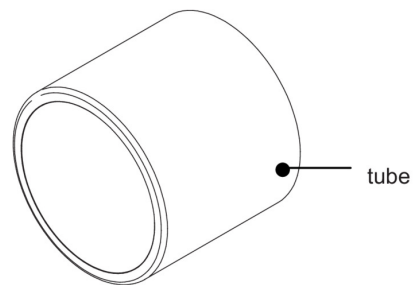
Principle

Optional accessories for protection class IP 65/67:



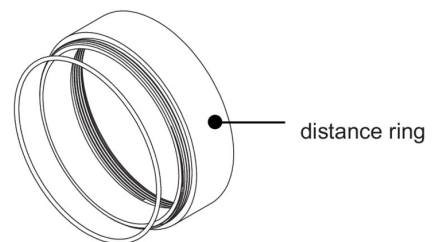
- hard-anodized, incl. sealing and screws
Ø 49.5 mm (VCXG.I 11185373)
Ø 65 mm (VCXG.I 11185377)
Ø 65 mm (VLXT 11193125)

tube



- hard-anodized, cover glass PMMA
Ø 49.5 mm, length 44 mm (11185370)
Ø 65 mm, length 58 mm (11185374)
- hard-anodized, tempered laminated safety glass
Ø 49.5 mm, length 44 mm (11701124)
Ø 65 mm, length 58 mm (11701125)

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)