

mvBlueCOUGAR-X

Next generation GigE cameras



Mini size
max performance

www.matrix-vision.de



- compact industrial camera series with Gigabit Ethernet
- quality CCD & CMOS sensors from VGA up to 5 megapixels
- hardware preprocessing on board (FPGA)
- highest resolution ADC
- image memory 64 MB
- micro-PLC for real-time sequencing (HRTC)

mvBlueCOUGAR-X

more and up-to-date infos see ▼



www.matrix-vision.com/mvBlueCOUGAR

MATRIX VISION presents its all new mvBlueCOUGAR-X.

The next generation GigE cameras combine the features X-tra small, low power, high performance, unique and economical with

a superior image quality, suited for almost every applications. Due to its tiny size, an easy integration is possible in every environment.

Hardware

<ul style="list-style-type: none"> ▶ Gigabit Ethernet interface (1000 Mbit/s with 100 Mbit/s compatibility) ▶ distances up to 100 meters without switch ▶ 64 MB image memory ▶ smart I/O: <ul style="list-style-type: none"> 2 inputs (opto-isolated with current limiters) 5..24 V ± 1 V 4 outputs (high-side) up to 30 V and 700 mA (1.5 A total) direct drive output for high power flash or relays or actuators ▶ support for motorized lenses ▶ connectors: <ul style="list-style-type: none"> RJ-45 Gigabit Ethernet with screw-locking industry standard Hirose type 12-pin locking connector ▶ industrial power supply range 12..24 VDC ▶ micro-PLC sequencer (HRTC) for time critical I/O and acquisition control by defining a sequence of operating steps ▶ adjustable C-mount, CS-mount, S-mount (optional) 	<ul style="list-style-type: none"> ▶ ADC resolution: <ul style="list-style-type: none"> CCD: 14 bits (14/12/8 bit transfer) CMOS: ADC on chip ▶ freely editable LUT ▶ color correction matrix ▶ real-time flat field correction ▶ adjustable acquisition modes (frame rate vs. image quality) ▶ timestamp for camera synchronization ▶ storable user parameters ▶ electronic mirror functionality: <ul style="list-style-type: none"> CCD: horizontal CMOS: hor./vert. ▶ weight without lens: approx. 110 g ▶ perm. ambient temp. <ul style="list-style-type: none"> operation: 0 to 45 °C / 30 to 80 % RH storage: -20 to 60 °C / 20 to 90 % RH ▶ size without lens (w x h x l) 39.8 x 39.8 x 35 mm
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Software

<ul style="list-style-type: none"> ▶ Windows® and Linux® drivers (mvIMPACT Acquire) ▶ comes with free mvIMPACT Base library ▶ DirectShow® and Video for Linux driver ▶ wide range of third-party software support see website http://www.matrix-vision.com/products/software.php 	<ul style="list-style-type: none"> ▶ compatible with certified third-party GigE Vision® and GenIcam™ applications
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Available sensors

Model name	-120a	-120b	-122	-124	-125	-100w
Model variant	G/C*	G/C*	G/C*	G/C*	G/C*	G/C*
▶ resolution of active area	640 x 480	640 x 480	1280 x 964	1600 x 1200	2448 x 2050	752 x 480
▶ maximum frame rate	100 Hz	90 Hz	25 Hz	16 Hz	16 Hz	60 Hz
▶ sensor type	CCD	CCD	CCD	CCD	CCD	CMOS
▶ transfer type (CCD only)	full frame interline transfer	full frame interline transfer	full frame interline transfer	full frame interline transfer	full frame interline transfer	-
▶ shutter type (CMOS only)	-	-	-	-	-	full frame
▶ sensor category	1/3 "	1/2 "	1/3 "	1/1.8 "	2/3 "	1/3 "
▶ pixel size (width x height in [μm])	7.4 x 7.4	9.9 x 9.9	3.75 x 3.75	4.4 x 4.4	3.45 x 3.45	6 x 6
▶ readout type (CCD only)	progressive	progressive	progressive	progressive	progressive	-
▶ integration time	20 μs - 128 s	20 μs - 128 s	20 μs - 128 s	20 μs - 128 s	20 μs - 128 s	10 μs - 1 s
▶ overlap capabilities	yes	yes	yes	yes	yes	yes
▶ sensor supplier	Sony	Sony	Sony	Sony	Sony	Aptina
▶ sensor name	ICX414AL/AQ	ICX424AL/AQ	ICX445ALA/AQA	ICX274AL/AQ	ICX625AL/AQ	MT9V034

* G = Gray C = Color

Dimensional drawing

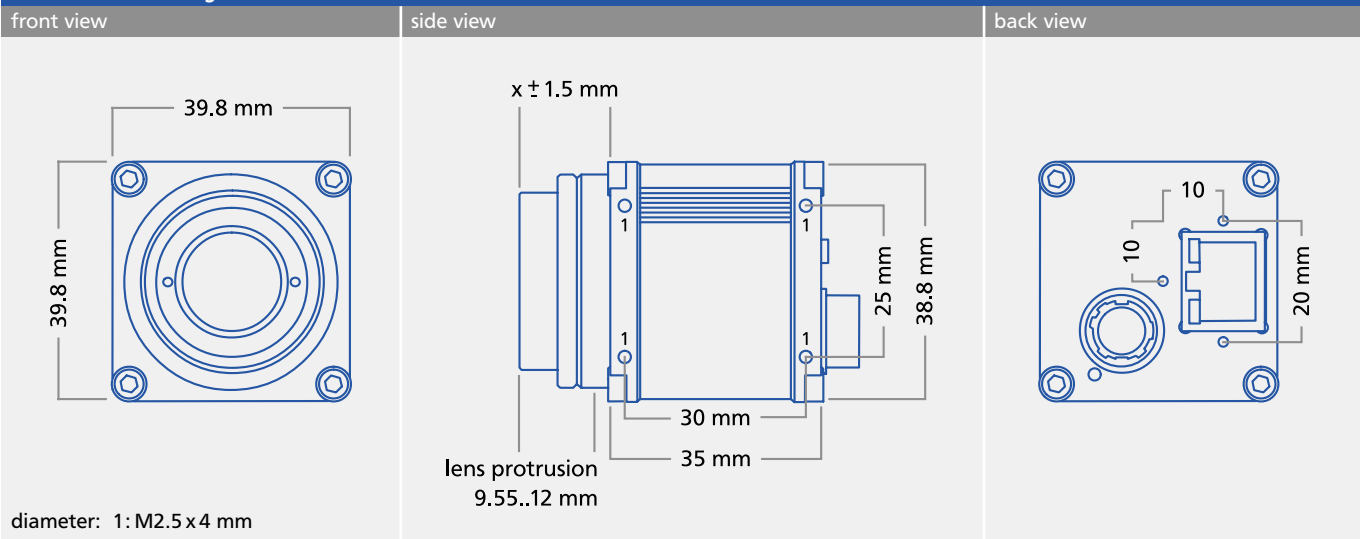


Image formats

- ▶ gray scale sensors Mono8, Mono16 (LSB aligned), Mono12_Packed
- ▶ color sensors RGB8_Packed (interpolation in camera), RGBA8_Packed, BayerGR8 (RAW; non-interpolated as well as RG, GB, BG), BayerGR16 (LSB aligned; non-interpolated as well as RG, GB, BG), YUV422_Packed (interpolation in camera), YUV444_Packed (interpolation in camera)

Accessories

- ▶ tripod adapter
- ▶ 12 V power supply with 12-pin connector
optional: industrial power supply (24 V)
- ▶ I/O cabling, length up to 10 m
- ▶ angled I/O connector
- ▶ RJ45 with screw locking, length up to 100 m
on request: screw locking cables with additional dust protection
- ▶ RJ45 angled screw locking connectors for space limited applications
- ▶ PCI Express® cards with (single or quad) Intel pro chip
set supporting jumbo packets and interrupt moderation
- ▶ card with jumbo packet support

Application areas

- ▶ machine vision
- ▶ surveillance
- ▶ life science
- ▶ medical application
- ▶ microscopy

mvIMPACT Base package

- ▶ more than 120 image processing functions
- ▶ display graphics overlay
- ▶ image data handling
- ▶ file operations

FOR FREE!

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