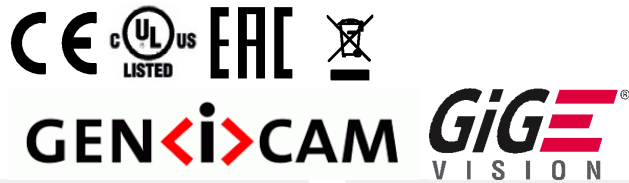
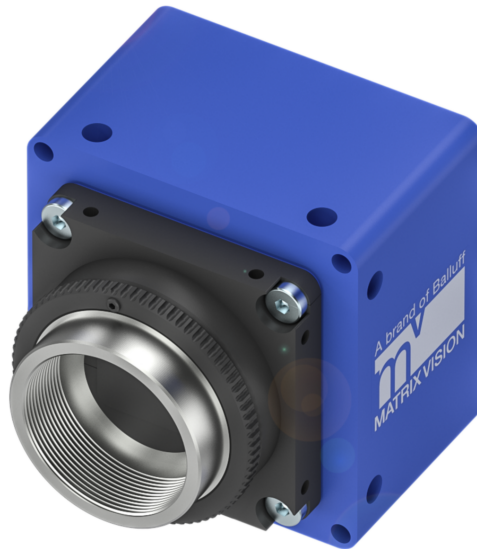


MATRIX VISION Industrial Cameras  
mvBlueCOUGAR-XD Series - Standard



**BVS CA-GX2-xxxxxx-(1)(2)(3)(4)(5)(6)-001**

**mvBlueCOUGAR-XD / BVS CA-GX2-xxxxxx-(1)(2)(3)(4)(5)(6)-001**  
Dual-GigE Vision industrial camera

**xxxxxx Model**  
See table below

**(1) Handling**  
1 = Standard handling

**(2) Lensholder**  
1 = C-Mount, Type2, with high durability and factory-set backfocus, fixed square filter  
2 = C-Mount, Type1, with adjustable backfocus, round filter with screw ring, Ø23.2 mm  
5 = C-Mount, Type3 (low cost, factory-set backfocus, Ø23.2 mm Filter)  
N = M42x1 mount, 12mm factory-set backfocus, fixed square filter  
P = M42x1 mount, 45.5mm factory-set backfocus, fixed square filter  
Q = F-Mount, 46mm factory-set backfocus, fixed square filter  
T = TFL mount, 17.5 mm factory-set backfocus, fixed square filter

**(3) Filter**  
0 = Without filter  
1 = IR-Cut  
2 = Glass filter  
3 = Daylight cut

**(4) Housing**  
1 = Standard housing, blue with logo, aluminium

**(5) I/O**  
2 = Standard I/Os

**(6) Software**  
0 = None

**MATRIX VISION Industrial Cameras**  
**mvBlueCOUGAR-XD Series - Standard**



Balluff model name	Model name	Resolution	FPS	Sensor	Pixel size
BVS CA-GX2-	mvBlueCOUGAR-XD				
0016ZG/C	102fG/C	1.6 MP (1456 x 1088)	226.5/149.9*	IMX273 (1/2.9", GS, CMOS)	3.45 µm
0024ZG/C	104dG/C	2.4 MP (1936 x 1216)	164/100.8*	IMX174 (1/1.2", GS, CMOS)	5.86 µm
0032ZG/C	104hG/C	3.2 MP (2064 x 1544)	123/74.5*	IMX252 (1/1.8", GS, CMOS)	3.45 µm
0051ZG/C	105aG/C	5.1 MP (2464 x 2056)	80/46.8*	IMX250 (2/3", GS, CMOS)	3.45 µm
0051DG/C	105dG/C	5.1 MP (2472 x 2064)	74.0/46.5*	IMX547 (1/1.8", GS, CMOS)	2.74 µm
0071ZG/C	107G/C	7.1 MP (3216 x 2208)	50.6/33.4*	IMX420 (1.1", GS, CMOS)	4.5 µm
0071AG/C	107bG/C	7.1 MP (3216 x 2208)	50.9/33.4*	IMX428 (1.1", GS, CMOS)	4.5 µm
0081AG/C	108aG/C	8.1 MP (2856 x 2848)	48.0/29.1*	IMX546 (2/3", GS, CMOS)	2.74 µm
0089AG/C	109bG/C	8.9 MP (4096 x 2176)	31.9/26.6*	IMX267 (1", GS, CMOS)	3.45 µm
0124AG/C	1012bG/C	12.3 MP (4096 x 3008)	23/19.2*	IMX304 (1.1", GS, CMOS)	3.45 µm
0124DG/C	1012dG/C	12.4 MP (4128 x 3008)	33.0/19.1*	IMX545 (1/1.1", GS, CMOS)	2.74 µm
0162AG/C	1016G/C	16.2 MP (5328 x 3040)	26.3/14.6*	IMX542 (1.1", GS, CMOS)	2.74 µm
0204AG/C	1020aG/C	20.4 MP (4512 x 4512)	20.9/11.6*	IMX541 (1.1", GS, CMOS)	2.74 µm
0246AG/C	1025G/C	24.6 MP (5328 x 4608)	17.6/9.6*	IMX540 (1.2", GS, CMOS)	2.74 µm
0315ZG/C	1031G/C	31.5 MP (6480 x 4856)	12.1/7.5*	IMX342 (APS-C, GS, CMOS)	3.45 µm

*G/C = Monochrome and color models available*  
*FPS = Frames per Second*  
*GS = Global Shutter*  
*RS = Rolling Shutter*  
*\* = Burst Mode/Streaming*

# MATRIX VISION Industrial Cameras mvBlueCOUGAR-XD Series - Standard



## Basic features

<b>Approval/Conformity</b>	CE cULus EAC WEEE
<b>Standards</b>	EMVA 1288 GigE Vision GenICam
<b>Version</b>	GigE Vision industrial camera

## Electrical connection

<b>Connection 1</b>	GigE-Bus: RJ45-Female, 8-pin
<b>Connection 2</b>	GigE-Bus: RJ45-Female, 8-pin
<b>Connection 3</b>	Power/ IO: HIROSE-Male, 12-pin
<b>Connection 4</b>	Lens control / IO: HIROSE-Female, 12-pin
<b>Connection 5</b>	Video iris: Jack plug, 4-pin
<b>Polarity reversal protected</b>	yes
<b>Short-circuit protection</b>	yes

## Electrical data

<b>Current draw max.</b>	1000 mA
<b>Operating voltage Ub</b>	10...28 VDC

## Environmental conditions

<b>Ambient temperature</b>	0...45 °C
<b>EN 60068-2-27, Shock</b>	-
<b>EN 60068-2-6, Vibration</b>	-
<b>IP rating</b>	IP30
<b>Relative humidity</b>	20...80%
<b>Storage temperature</b>	-20...60 °C

## Remarks

Not included in scope of delivery: Camera lens, filter, light, connection cable, power supply

\* Refer to manual for exact values

For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

## Functional Characteristics

<b>Binning</b>	1x1...16x16 *
<b>Data storage</b>	256 MB
<b>Decimation</b>	1x1...16x16 *
<b>Exposure time</b>	10 µs...20 s *
<b>Filter</b>	IR cut filter, other filters on request
<b>Image formats</b>	Mono8...Mono16 Bayer8...Bayer16, RGB, YUV *
<b>Trigger Modi</b>	Free run Hardware trigger Software trigger

## Interface

<b>Auxiliary interfaces</b>	RS232
<b>Digital inputs</b>	4x PNP galvanically isolated
<b>Digital outputs</b>	4x PNP high side
<b>Interface</b>	2 x Gigabit Ethernet

## Material

<b>Housing material</b>	Aluminium, Powder coated
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## Mechanical data

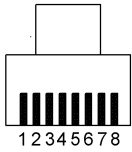
<b>Dimension</b>	50 mm x 50 mm x 52.1 mm
<b>Lens mount</b>	C-Mount
<b>Weight</b>	170 g

MATRIX VISION Industrial Cameras  
mvBlueCOUGAR-XD Series - Standard



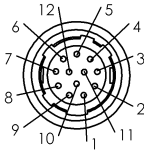
Connector Diagramm

RJ45



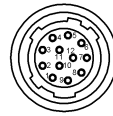
- PIN 1: BI\_DA+
- PIN 2: BI\_DA-
- PIN 3: BI\_DB+
- PIN 4: BI\_DC+
- PIN 5: BI\_DC-
- PIN 6: BI\_DB-
- PIN 7: BI\_DD+
- PIN 8: BI\_DD-

Power / IO



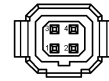
- PIN 1: GND
- PIN 2: PWR\_IN
- PIN 3: DigOut3
- PIN 4: Opto DigIn0
- PIN 5: DigOut2
- PIN 6: DigOut0
- PIN 7: Opto DigIn\_GND
- PIN 8: RS232 RX
- PIN 9: RS232 TX
- PIN10: DigOut\_PWR\_IN
- PIN11: Opto DigIn1
- PIN12: DigOut1

Lens Control / IO



- PIN 1: Opto DigIn2
- PIN 2: Opto DigIn\_GND
- PIN 3: Opto DigIn3
- PIN 4: Focus+
- PIN 5: Focus-
- PIN 6: Zoom+
- PIN 7: Zoom-
- PIN 8: Iris+
- PIN 9: Iris-
- PIN10: Channel4+
- PIN11: Channel4-
- PIN12: GND

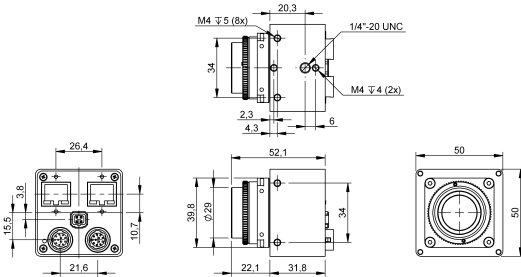
Video iris



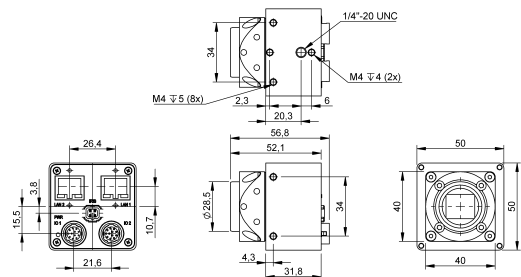
- PIN 1: IRIS\_PWR\_IN
- PIN 2: n.c.
- PIN 3: IRIS\_CTRL
- PIN 4: GND

Product View

BVS CA-GX2-xxxxxx-x2x11x



BVS CA-GX2-xxxxxx-x1x11x / -x5x11x



BVS CA-GX2-xxxxxx-xNx11x

