



Your Visions
will expand



www.matrix-vision.de



- compact industrial CCD & CMOS camera series with Gigabit Ethernet
- high quality sensors up to 1600 x 1200 pixels
- gray scale and color versions
- integrated image processing by intelligence

mvBlueCOUGAR-P

more and up-to-date infos see ▼



www.matrix-vision.com/mvBlueCOUGAR

MATRIX VISION's mvBlueCOUGAR-P is a compact industrial Gigabit Ethernet camera with a powerful PowerPC processor.

The processor makes sure that the image processing takes place at the sensor directly and

only the relevant data are transferred. Consequently bandwidth is saved allowing cameras with higher resolutions and frame rates to be used. Furthermore a processing server no longer has to perform low level processing actions.

For this reason, the mvBlueCOUGAR-P is suited mainly to applications in the security industry or for industrial inspection, where a multitude of cameras is used and a large amount of data are processed.

Hardware

- ▶ powerful PowerPC with 400 MHz
- ▶ compact Embedded Linux OS
- ▶ 64 MB SDRAM
- ▶ connectors:

RJ-45	Gigabit Ethernet
MDR 20-pin female	digital I/O, RS-232, power
- ▶ digital I/O opto-isolated:

2 inputs (trigger)	logic/PLC level
4 outputs (strobe)	max. 30 V/0.2 W
- ▶ electric power supply via Power over Ethernet (PoE) or 48 V power supply
- ▶ power consumption: < 7 W
- ▶ C-mount, CS-mount or optional S-mount
- ▶ Hardware Real-Time Controller (HRTC) for time critical I/O and acquisition control

- ▶ back-focus-adjustment
- ▶ ADC resolution: 8/10 bits
- ▶ input LUT
- ▶ flexible binning modes for increased frame rate and sensitivity
- ▶ overlapped exposition and image transfer
- ▶ automatic gain control (AGC)
- ▶ automatic exposure control (AEC)
- ▶ asynchronous trigger via digital input or GigE
- ▶ partial scan for faster chart acquisition
- ▶ progressive scan
- ▶ 4 LEDs for signaling
- ▶ weight without lens: approx. 200 g
- ▶ size without lens (w x h x l): 38.8 x 38.8 x 96 mm
- ▶ permissible ambient temperature: 0..40 °C

Software

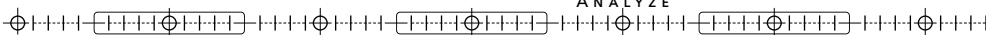
- ▶ Windows® and Linux® drivers (mvIMPACT Acquire)
- ▶ GigE Vision® and GenICam™ compliant
- ▶ comes with free mvIMPACT Base
- ▶ preconfigured development environment on DVD

Legal notice: The contents of this brochure are intended to provide information only and to show possible examples. We reserve the right to change technical data and construction at any time without prior notice. The technical specifications of customer systems and of our current products have to be clarified when ordering. Date 06/2009



MATRIX VISION GmbH
 Talstrasse 16
 DE-71570 Oppenweiler
 Phone: +49-7191-9432-0
 Fax: +49-7191-9432-288
 info@matrix-vision.de

RECOGNIZE ANALYZE DECIDE



Available sensors					
Model name	-P120a	-P121	-P122	-P124	-P102a
Model variant	G/C*	G/C*	G/C*	G/C*	G*
▶ Sensor supplier	Sony	Sony	Sony	Sony	Micron
▶ Sensor name	ICX424AL/AQ	ICX204AL/AQ	ICX445ALA/AQA	ICX274AL/AQ	MT9M001
▶ Sensor type	CCD	CCD	CCD	CCD	CMOS
▶ Indication of lens category to be used	1/3 "	1/3 "	1/3 "	1/1.8 "	1/2 "
▶ Resolution of sensor's active area (width x height in [pixels])	640 x 480	1024 x 768	1280 x 964	1600 x 1200	1280 x 1024
▶ Pixel size (width x height in [μm])	7.4 x 7.4	4.65 x 4.65	3.75 x 3.75	4.4 x 4.4	5.2 x 5.2
▶ Readout type (CCD only)	Progressive	Progressive	Progressive	Progressive	-
▶ Transfer type (CCD only)	Full Frame	Full Frame	Full Frame	Full Frame	-
▶ Shutter type (CMOS only)	-	-	-	-	Rolling
▶ Overlap capabilities	yes	yes	yes	yes	yes
▶ Maximum frame rate [Hz]	100	39	25	17	25
▶ Integration time	5 μs - 128 s	5 μs - 128 s	5 μs - 128 s	5 μs - 128 s	38 μs - 0.5 s
▶ Specials	-	-	High sensitivity with EXview HAD CCD™	High sensitivity with Super HAD CCD™	-

* G = Gray C = Color

Dimensional drawing		
front view	side view	back view
<p>38.8 mm</p> <p>38.8 mm</p> <p>25 mm</p> <p>25 mm</p> <p>diameter: 1: M2.5 x 4 mm</p>	<p>96 (90.6) mm</p> <p>90.5 (85) mm</p> <p>75 mm</p> <p>1</p> <p>1</p> <p>1</p> <p>CCD (CMOS)</p>	



Accessories	
▶ MV-DC4807 BC	power supply 48 V/0.75 A
▶ MV-DC4807 BC RS232	power supply 48 V/0.75 A with periphery cable, 4 x dig. I/O and RS-232
▶ KS-GIGE	GigE CAT5e cable, length up to 20 m
▶ ADAPTER CS-MOUNT	CS-mount lens fixing
▶ MV-Tripod Adapter	tripod adapter

Application areas
▶ machine vision
▶ robotics
▶ surveillance
▶ medical imaging

Legal notice: The contents of this brochure are intended to provide information only and to show possible examples. We reserve the right to change technical data and construction at any time without prior notice. The technical specifications of customer systems and of our current products have to be clarified when ordering. [Date 06/2009](#)



MATRIX VISION GmbH
 Talstrasse 16
 DE-71570 Oppenweiler
 Phone: +49-7191-94 32-0
 Fax: +49-7191-94 32-288
info@matrix-vision.de