

# mvBlueCOUGAR-S

Industrial Gigabit Ethernet CCD cameras



## Super visions for a new point of view

www.matrix-vision.de



- compact industrial CCD camera series with Gigabit Ethernet
- GigE Vision® and GenICam™ compliant
- high quality sensors from VGA up to 5 megapixels
- variable electronic shutter mode
- hardware and software trigger
- PoE or external power supply possible

## mvBlueCOUGAR-S

more and up-to-date infos see ▼



www.matrix-vision.com/mvBlueCOUGAR

The MATRIX VISION mvBlueCOUGAR-S is a compact and flexible industrial camera compliant to GigE Vision® and GenICam™.

The Gigabit Ethernet interface transfers 1 Gbit/s over up to 100 meters using inexpensive standard network components. The camera allows an easy integration in the environ-

ment and supports the application to deliver faster and better results. The camera replaces analog image processing solutions.

### Hardware

<ul style="list-style-type: none"> <li>▶ Gigabit Ethernet interface</li> <li>▶ distances up to 100 meters without switch</li> <li>▶ digital I/O opto-isolated:                             <ul style="list-style-type: none"> <li>1 input (trigger) 5..24 V ± 1 V</li> <li>1 output (strobe) 5 V ± 0.3 V</li> </ul> </li> <li>▶ connectors:                             <ul style="list-style-type: none"> <li>RJ-45 Gigabit Ethernet</li> <li>circular connector power supply, digital I/O</li> </ul> </li> <li>▶ electric power supply via                             <ul style="list-style-type: none"> <li>Power over Ethernet (PoE) or 12 V power supply</li> </ul> </li> <li>▶ ADC resolutions: 8/10/12 bits</li> <li>▶ binning mode</li> <li>▶ gamma correction</li> </ul>	<ul style="list-style-type: none"> <li>▶ adjustable sharpness and brightness</li> <li>▶ automatic and variable electronic shutter modes</li> <li>▶ image area is adjustable horizontally/vertically (AOI)</li> <li>▶ enhanced white balance functionality</li> <li>▶ automatic gain and exposure</li> <li>▶ progressive scan</li> <li>▶ C-mount</li> <li>▶ weight without lens: approx. 140 g</li> <li>▶ permissible ambient temperature:                             <ul style="list-style-type: none"> <li>performance: 0 to 40 °C/30 to 80 % RH</li> <li>storage -20 to 60 °C/20 to 90 % RH</li> </ul> </li> <li>▶ size without lens (w x h x l): 44 x 29 x 72 mm</li> </ul>
--	---

### Software

- ▶ Windows® and Linux® drivers, 32bit/64bit (mvIMPACT Acquire)
- ▶ GigE Vision® and GenICam™ compliant
- ▶ comes with free mvIMPACT Base library
- ▶ wxPropView camera control software

### Application areas

- ▶ machine vision
- ▶ robotics
- ▶ surveillance
- ▶ medical imaging

RECOGNIZE ANALYZE DECIDE

www.matrix-vision.de



Available sensors							
Model name	-S120a		-S121		-S123		
Model variant	G Gray	C Color	G Gray	C Color	G Gray	C Color	
▶ resolution of active area	640 x 480		1024 x 768		1360 x 1024		
▶ maximum frame rate [Hz]	90		36		30		
▶ sensor type	CCD		CCD		CCD		
▶ transfer / shutter type	full frame		full frame		full frame		
▶ indication of lens category to be used	1/3 "		1/3 "		1/2 "		
▶ pixel size (width x height in [µm])	7.4 x 7.4		4.65 x 4.65		4.65 x 4.65		
▶ readout type (CCD only)	progressive		progressive		progressive		
▶ integration time	10 µs - 10 s		10 µs - 10 s		10 µs - 10 s		
▶ overlap capabilities	yes		yes		yes		
▶ sensitivity	2000 1x, F11 3200 K	2000 1x, F5.6 3200 K	2000 1x, F11 3200 K	2000 1x, F5.6 3200 K	2000 1x, F11 3200 K	2000 1x, 5.6 3200 K	
▶ sensor manufacturer	Sony		Sony		Sony		
▶ sensor name	ICX424AL-A/AQ-A		ICX204AL-A/AK-A		ICX267AL-A/AK-B		
▶ power consumption (DC +12 V)	approx. 5.2 W		approx. 4.8 W		approx. 7.0 W		

Model name	-S124		-S125	
Model variant	G Gray	C Color	G Gray	C Color
▶ resolution of active area	1620 x 1220		2448 x 2050	
▶ maximum frame rate [Hz]	30		16	7
▶ sensor type	CCD		CCD	
▶ transfer / shutter type	full frame		full frame	
▶ indication of lens category to be used	1/1.8 "		2/3 "	
▶ pixel size (width x height in [µm])	4.4 x 4.4		3.45 x 3.45	
▶ readout type (CCD only)	progressive		progressive	
▶ integration time	10 µs - 10 s		10 µs - 10 s	
▶ overlap capabilities	yes		yes	
▶ sensitivity	2000 1x, F11 3200K	2000 1x, F5.6 3200K	2000 1x, F11 3200K	2000 1x, F8 3200K
▶ sensor manufacturer	Sony		Sony	
▶ sensor name	ICX274AL/AQ		ICX625AL/AQ	
▶ power consumption (DC +12 V)	approx. 7.8 W		approx. 7.4 W	

Image formats	
▶ gray scale sensors	Mono8, Mono10, Mono12
▶ color sensors	Mono8, Mono10, Mono12, RGB8_Packed, BGR8_Packed, BayerRG8, BayerRG10, BayerRG12, YUV422_UYVYPacked

Dimensional drawing		
front view	side view	back view
<p>sizes in mm</p>		

Accessories	
▶ MV-DC1201 BCS	power supply 12 V
▶ MV-DC1201 BCS IO REV2	power supply 12 V with digital I/O on separate cable
▶ MV-Tripod Adapter	tripod adapter
▶ KS-GIGE LS SLK	GigE CAT6 cable with horizontal screwlock, drag chain capable
▶ KS-GIGE LS SLK AK90L	GigE CAT6 cable with horizontal screwlock, drag chain capable, plug 90° angled left
▶ KS-GIGE LS SLK AK90R	GigE CAT6 cable with horizontal screwlock, drag chain capable, plug 90° angled right

mvIMPACT Base package
▶ over 120 image processing functions
▶ display graphic overlay
▶ image data handling
▶ file operations

**FOR FREE!**



**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 10/2009

RECOGNIZE      ANALYZE      DECIDE

www.matrix-vision.de

**MATRIX VISION**