

USB3 Vision camera series



smallest single board design • lowest power consumption • ultra-fast



xiQ

board level and housed cameras

xiQ - quick facts

xiQ [ksi-kju: or sai-kju:] is an ultra-compact USB3 Vision Standard compatible industrial camera family with outstanding features:

- Extremely small footprint
- Lowest thermal dissipation
- Single PCB, board level versions available: perfect for OEM integration



Industry standard interface	Compliant with USB 3.0 SuperSpeed specification
AIA standard compatibility	USB3 Vision Standard Compliant
Small	Fits into places where no other camera can fit
Cool	Due to low power consumption, 0.9 to 1.8 W, supplied via USB3.0 interface
Effective	5 Gb/s interface up to 400 Mpix/s data throughput
Fast	High speed, high frame rate: >500 fps at VGA and 90 fps at 4 Mpix resolutions
Robust	Full metal housing, no sheet metal covers
Lightweight	Facilitates increased performance of robotic arms and gimbals
Lens mount	Standard C-mount, convertible to CS mount or board level without mount
Connectivity	Programmable opto-isolated input and output, 3 status LEDs
Compatible	Support for Windows, Linux and Mac OS X, largest range of Image Processing Libraries
Software interfaces	GenICam / GenTL and highly optimized xiAPI SDK
Auto adjustments	Auto white balance, auto gain, auto exposure
Sensor Technology	Most recent generation of CMOS sensors with global shutter
Economical	Excellent value and price, low TCO and fast ROI

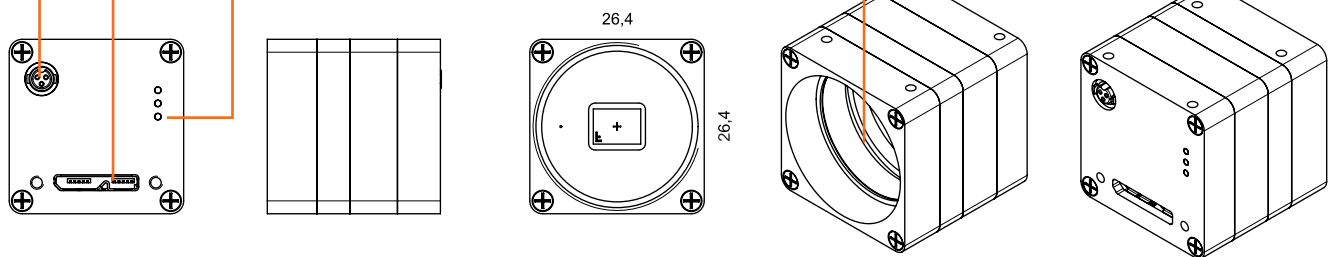


1 * fast opto-isolated input
1 * fast opto-isolated output

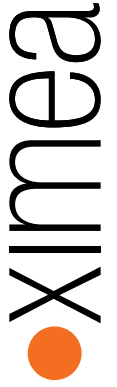
Standard C/CS lens mount with hard AR coated glass or IR filter

SuperSpeed USB3.0 image data port

LED indicators



xiQ - leading vision libraries supported



- Quick integration with third-party software using our easy-to-learn API/SDK and many examples made for AQSENSE SAL3D, Open CV, Aforge.NET, etc.
- All XIMEA cameras are plug-and-play compatible with most of the major image processing libraries on the market, including **MVTec HALCON**, **National Instruments LabVIEW**, **MathWorks MATLAB**, **STEMMER IMAGING Common Vision Blox**, **OpenCV** and many others.
- Support for GenICam/GenTL ensures forward compatibility with emerging image processing libraries, frameworks and packages.
- One-stop support of the camera and vision libraries integration.
- Open online community: Share experience, exchange knowledge and solutions at www.ximea.com/community.

Compatible with more than 30 popular machine vision libraries:

Please checke webstie for up-to-date list:



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xiQ - series camera specifications

Sensors and models:

Model ¹⁾	Sensor	Resolution	Pixel size [µm]	ADC [bits]	DR [dB]	Optical size	Sensor size/diagonal [mm]	FPS ²⁾	Max. power consumption
MQ003MG-CM	b/w	CMOSIS CMV300	648x488 VGA	10	60 ²⁾	1/3"	4.8 x 3.6 5.9	>500	1.3
MQ003CG-CM	Color								
MQ013MG-E2	b/w	E2V EV76C560	1280x1024 1.3 MP	10	>60	1/1.8"	6.9 x 5.5 8.7	60	0.9
MQ013CG-E2	Color								
MQ013RG-E2	b/w NIR	E2V EV76C661							
MQ013MG-ON	b/w	Onsemi VITA1300	1280x1024 1.3 MP	10	53	1/2"	6.2 x 5.0 7.9	150	1.4
MQ013CG-ON	Color								
MQ022MG-CM	b/w	CMOSIS CMV2000	2048x1088 2.2 MP	10	60 ²⁾	2/3"	11.3 x 6.0 12.8	170	1.8
MQ022CG-CM	Color								
MQ022RG-CM	b/w NIR								
MQ042MG-CM	b/w	CMOSIS CMV4000	2048x2048 4.2 MP	10	60 ²⁾	1"	11.3 x 11.3 15.9	90	1.8
MQ042CG-CM	Color								
MQ042RG-CM	b/w NIR								

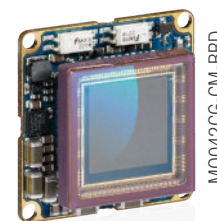
Note 1: Please add „-BRD" in the model name to address the board level cameras

Note 2: HDR mode available

Note 3: RAW, 8 bit, full resolution

Interfaces, connectors, environmental:

Description	Value
Optimum ambient temperature	+10 to +25 °C
Ambient temperature operation	-10 to +55 °C (non condensing humidity)
Environment	Ingress Protection IP40
USB3.0 connectors	Standard USB3.0 Micro-B connector with thumbscrews
I/O & sync connector	Hirose SR38-4R-3S(71) with optional locking nut



Compatibility:

Standard **Windows, Linux & MacOS** operation systems • GenICam / GenTL • Single SDK/API for all XIMEA camera models.

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Contact:

Please visit ximea.com for complete product information.

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