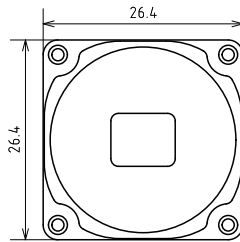
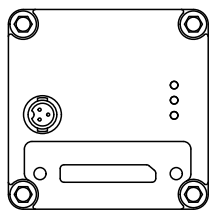
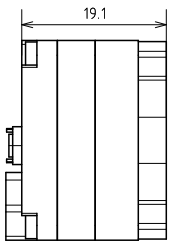


USB3.0 industrial cameras.

Unbeatable price-to-performance ratio. Global shutter, VGA to 4Mpix.
5Gbit/s bus bandwidth guarantees deterministic low-latency data delivery.
Miniature housing with locking connectors, LEDs and isolated synchronization I/Os.

MQ series



ONE CUBIC INCH

Plug&Play compatibility with
image processing packages.
400Mpix/sec performance.

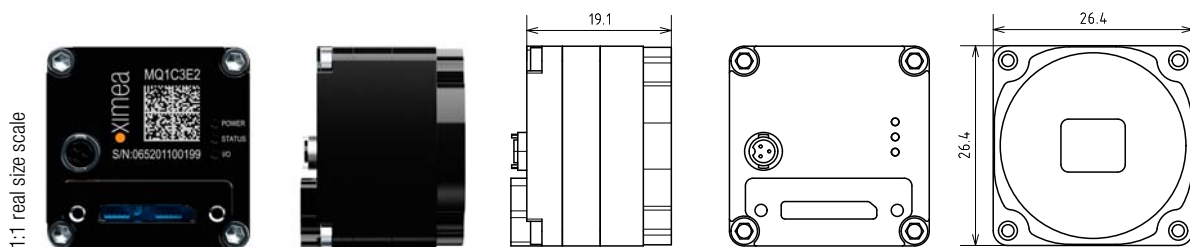
ximea



Price. Performance. Compatibility. Support.

MQ Series quick facts:

- Low-cost solution for applications requiring high speed data throughput.
- SuperSpeed USB3.0 interface for image data delivery, camera control and power supply.
- Robust thumbscrew lock and mechanically reinforced USB3.0 Micro-B receptacle.
- Range of innovative CMOS sensors up to 4 MPix with global shutter, Bayer color and B/W.
- High quantum efficiency in the visible and NIR spectral ranges.
- Frame rates ranging from 90fps for 4Mpix sensor to 600fps for VGA sensor.
- Support for HDR modes up to 100 dB, 4X more than comparable cameras.
- GPIO connector provides software configurable opto-isolated trigger input and light synchronization output.
- Auto exposure, auto gain, auto white balance and shading correction algorithms are supported via SDK.
- Active extension cables allow operation of the camera as far as 20m (65ft) away from the PC.



Leading vision libraries supported

- Quick integration with third-party software using our easy-to-learn API/SDK and dozens of 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**, **Open CV** and many others.
- Support for GenICam/GenTL ensures forward compatibility with emerging image processing libraries, frameworks and packages.
- Just one-stop support of the camera and vision libraries integration.
- Open online community: Share experience, exchange knowledge and solutions at www.ximea.com/community.

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MQ series cameras specifications

Sensors and models:

B/W Models	Color models	Sensor	Sensor resolution	Pixel size	ADC	FPS ⁽¹⁾	DR	Optical size	Sensor diagonal
MQ003MG-CM	MQ003CG-CM	CMV300	648 x 488 pixels	7.4 µm	10 bits	600	66 dB	1/3"	6.0 mm
MQ013MG-E2	MQ013CG-E2	EV76C560	1280 x 1024 pixels	5.3 µm	10 bits	60	66 dB	1/1.8"	8.7 mm
MQ013MG-ON	MQ013CG-ON	VITA1300	1280 x 1024 pixels	4.8 µm	10 bits	150	TBD	1/2"	7.9 mm
MQ022MG-CM	MQ022MG-CM	CMV2000	2048 x 1088 pixels	5.5 µm	12/10 bits	180	60 dB	2/3"	12.8 mm
MQ042MG-CM	MQ042CG-CM	CMV4000	2048 x 2048 pixels	5.5 µm	12/10 bits	90	60 dB	1"	15.9 mm

Note 1: Maximum frame rates measured at 8 bits per pixel

Electrical, mechanical and environmental:

Power Requirements	Powered via USB3.0 host port	
Housing Dimensions	WxHxD 26.4 x 26.4 x 19.1mm	Weight: 26g
Environmental	Ingress Protection: IP40	Operating temperature -10°C to +55°C

Interfaces and connectors:

Connector	Signals	Mating Connectors:
USB3.0	Standard USB 3.0 Micro-B Receptacle	Standard USB 3.0 Micro-B Plug with thumbscrews
I/O & Sync	Opto-isolated trigger input and illuminator sync output	Hirose SR38-4P-3P(71) with optional locking nut

Accessories:

Item P/N	Description
CBL-U3-3M0	3.0m USB 3.0 cable with thumbscrews lock connector
CBL-U3-7M0	7.0m USB 3.0 cable with active repeater
CBL-U3A-10M0	10.0m USB 3.0 cable, active repeater
CBL-U3A-15M0	15.0m USB 3.0 cable, active repeater
CBL-U3A-20M0	20.0m USB 3.0 cable, active repeater
CBL-MQSYNC-3M0	3.0m MQ series I/O Sync cable with thread lock, 3 poles
MQ-BRACKET-A	MQ series mounting bracket model A
MQ-BRACKET-B	MQ series mounting bracket model B
MQ-BRACKET-T	MQ series tripod mounting bracket
U3PE-FL1009	PCI express adapter, 2x USB 3.0 ports

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Information provided herein is subject to change without notice.

XIMEA strives to deliver extremely compact cameras and imaging systems with the highest levels of processing power, maximum compatibility and extraordinary support at competitive prices. The scope covers industrial cameras for motion control, assembly, robotics, and industrial inspection and process control, as well as scientific cameras for life and material sciences, security, law enforcement and defense applications.



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