



•ximea

xiRAY

X-ray CCD and sCMOS cameras



xiRAY cameras for extraordinary x-ray imaging

See the invisible

Facts

- 8.1 - 15.8 Mpix large area sensors
- Fiber optic coupled phosphor screen
- Sensitive phosphor screens with excellent optical conversion
- Ultra-low readout noise
- Active TEC cooling for thermal noise reduction
- 14 bits per pixel A/D conversion (CCD) or sCMOS image quality
- Partial readout and binning modes for enhanced sensitivity and frame rates

Features

- CCD and sCMOS sensor technology for highest image quality & sensitivity
- Compact camera with full frame sensors with field of view up to 36 x 24 mm
- Fiber optic plate bonded directly to a sensor
- Faceplate scintillators P43 Gd2O2S:Tb or custom options
- Energy range 5 keV - 100 keV
- Low power consumption
- Ultra-precision, aluminum alloy, CNC milled housing



Small and compact

The xiRay cameras use an 11 or 16 MPixel sensor, bonded to a 5 mm fiber-optic plate, coupled to a scintillator sensitive to 5 to 100 keV x-rays. This makes this camera the ultimate camera for micro-tomography, medical applications and inspection such as homeland security, manufacturing and other demanding applications.

Easy to integrate

xiRay cameras are easy to deploy and replace with a 5 mm fiber plate that will help protect the sensor from damaging x-rays. When replacement becomes necessary, the robustness and compact build of the cameras allow a quick and easy exchange of the entire camera head.

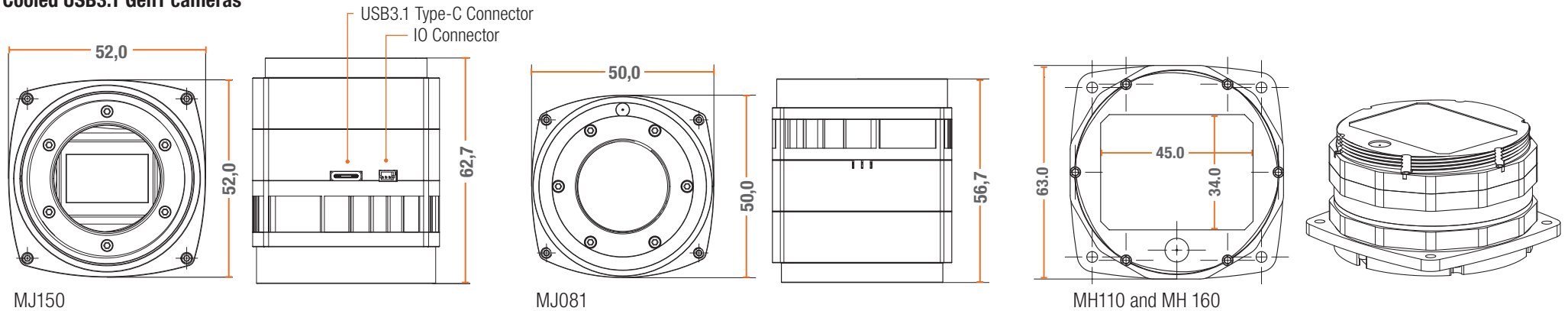
Optimized for highest image quality and sensitivity

The use of ultra-low noise CCD technology, coupled with moderate cooling, provides superior sensitivity and image quality. All built into a full metal housing that guarantees stability and longevity.

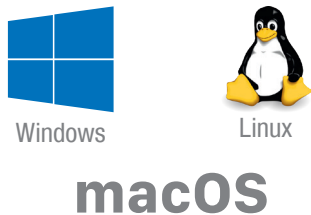
Customizable

We will configure and build xiRay cameras exactly for your specific application requirements. The option set includes other sensors, interfaces, scintillators and housing designs.

Cooled USB3.1 Gen1 cameras



Supported operating systems



Language support



Standards



Supported vision libraries



and many more ...

Sensors and models

Model		Sensor	Resolution	Pix. size [µm]	ADC [bits]	DR [dB]	FWC [ke-]	Dark noise [e-]	Sensor size / diagonal [mm]	Fps	Min. sensor temp °C ¹	Interface
MJ081XC-TS-TC ²	x-ray	OnSemi KAI08052	3296 x 2472 8.1 Mpix	5.5	16	66	20	10	18.1 x 13.6 22.6	5.3	-10	USB3.1
MJ081XC-TS-TP1:1.25 ²	x-ray	OnSemi KAI08052	3296 x 2472 8.1 Mpix	5.5	16	66	20	10	18.1 x 13.6 22.6	5.3	-10	USB3.1
MJ150XR-GP	x-ray	GPixel GSENSE5130	5120 x 2968 15.1 Mpix	4.25	2 x 12	82 HDR	16.5	1.5	21.8 x 12.6 25.1	17	-10	USB3.1
MJ150XR-GP-TP2:1	x-ray	GPixel GSENSE5130	5120 x 2968 15.1 Mpix	4.25	2 x 12	82 HDR	16.5	1.5	21.8 x 12.6 25.1	17	-10	USB3.1
MH110XC-KK-FA ²	x-ray	OnSemi KAI11002	4008 x 2672 10.7 Mpix	9	10, 12, 14	66	60	30	36.1 x 24.0 43.3	2.1	-10	Firewire
MH110XC-KK-TP2:1 ²	x-ray	OnSemi KAI11002	4008 x 2672 10.7 Mpix	9	10, 12, 14	66	60	30	36.1 x 24.0 43.3	2.1	TBD	Firewire
MH160XC-KK-FA ²	x-ray	OnSemi KAI16000	4872 x 3248 15.8 Mpix	7.4	10, 12, 14	65	30	18	36.1 x 24.0 43.3	1.4	TBD	Firewire

Notes

- ¹ Measurements are valid if additional components are used, such as a power injector. For lower cooling temperatures please inquire with our sales teams. 10°C is achievable with standard configuration.
- ² The production of the OnSemi CCD sensors has been discontinued. Therefore we only have few cameras left in stock. If you are looking for alternatives or have any further questions, please contact our sales team.

Sales offices

Worldwide

XIMEA GmbH

Am Mittelhafen 16
48155 Münster
Germany

Tel: +49 (251) 202 408 0

Slovakia and Czech Republic

XIMEA s.r.o

Lesna 52
900 33 Marianka
Slovakia

Tel: +421 (2) 205 104 26

America

XIMEA Corp.

8725 W 14th Ave
80215 Lakewood, CO
USA

Tel: +1 (303) 389 983 8

info@ximea.com

Further information

Please visit us at www.ximea.com for complete and up-to-date specifications. Get in touch with our teams at sales@ximea.com. We will be glad to assist!



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