

X-RAY CAMERA

Fiber-Coupled
Peltier-Cooled
11 and 16 MPix



xiRAY

Fiber-Coupled & Cooled X-ray Camera

Highlights

- High resolution direct phosphor imaging
- Peltier cooling
- Ultra-low readout noise
- Crystal clear 14 bit/pixel images
- Partial readout and binning modes with enhanced sensitivity and higher frame rates
- External triggering

Specifications

Sensors

	xiRAY11	xiRAY16
CCD Sensor	Truesense KAI-11002-AAA-CR-B1	Truesense KAI-16000-AAA-JR-B1
Resolution	4008 x 2672	4872 x 3248
Pixel size	9.0 x 9.0µm	7.4 x 7.4µm
Area size	36 x 24mm, 43mm diagonal	36 x 24mm, 43mm diagonal
ADC	14Bit	14Bit
Pixel Frequency	24.576MHz and 49.152MHz (HS mode)	24.576MHz and 49.152MHz (HS mode)
Refresh rates (full resolution)	2.1 fps and 3.6 fps in HS mode	1.2 fps and 2.5fps in HS mode
Readout noise	10 e	8 e
Dark current	40e/pix/sec @ 12°	18e/pix/sec @ 12°
Full well capacity	60,000 e-	30,000 e-
Linearity	<2% (of full scale) to 95% of full scale	<2% (of full scale) to 95% of full scale
Shutter	Internal, global, Interline transfer	Internal, global, Interline transfer

Fiber optics

Magnification	1:1	Fiber center to center distance	6µm
Field of view	36 x 24mm	FO plate thickness	5mm
Radiation hardened	yes	Extra-Mural Absorption	Enhanced Statistical

Scintillator

Phosphor composition	P43, Gd2O2S:Tb	Thickness	~22µm
Energy range	Min: 5 KeV, Max 100 KeV		

Cooling system

Type	TEC Peltier cooler	Dissipation	Heatsink, optional fan
Temperature	+12°C	Power supply / Control	Internal

Physical

Camera Interface	IEEE1394A	Power consumption	6W max
Dimensions	63 x 63 x 63mm	Operating Temperature	-5..+50°C

Specifications are subject to change without notice.

Please request pricing information at sales@ximea.com

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