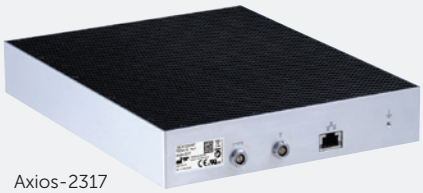
AXIOS-2317 | AXIOS-1717

X-Ray Detectors for Dental 3D Imaging Systems



Axios-2317

Axios-1717

KEY FEATURES

- Best in class image quality
- High performance IGZO TFT sensor
- 110.5 µm pixel pitch
- Selectable gain and pixel binning modes
- Programmable ROI readout
- 4GB scan buffer memory
- Real-time defect pixel corrections
- Image statistics for exposure control purposes
- NBASE-T 5 Gbps data interface (GigE compatible)
- Lead-free design

TYPICAL APPLICATIONS

- Dental 3D + Panoramic imaging
- Desktop & Mini C-arm Fluoroscopy

Teledyne DALSA's IGZO X-Ray Detectors: Better Images, Lower Dose, Lower Cost

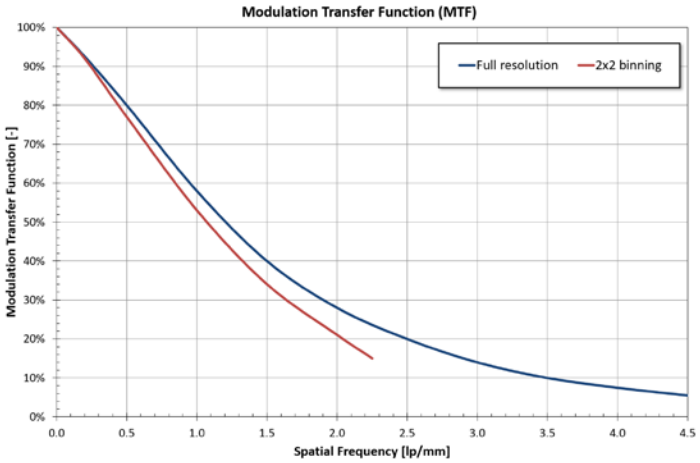
Teledyne DALSA, a worldwide leader in high performance X-ray imaging is introducing a new product line of high performance dynamic detectors, based on our innovative radiation-hard IGZO sensor technology. The Axios-2317 and Axios-1717 detectors are designed to address the demanding needs of dental orthodontics 3D and panoramic applications, providing compelling integration cost advantages.

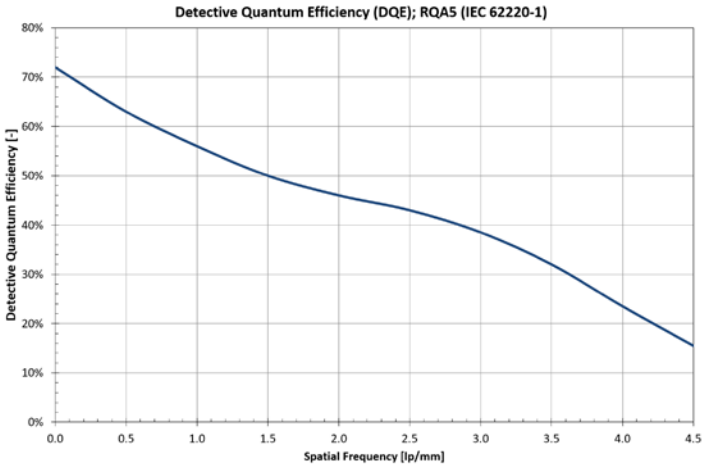
Teledyne DALSA's Axios-2317 & Axios-1717 performance exceeds the existent industry benchmarks for legacy amorphous silicon and emerging IGZO technologies by providing higher frame rates and DQE at low dose and increased signal-to-noise ratio. The proprietary technology and readout integrated circuits powering this detector provide artifact free images, enable easy integration and ensure reliable performance. The high thermal stability assures an efficient workflow with high productivity and reduced system calibration requirements.

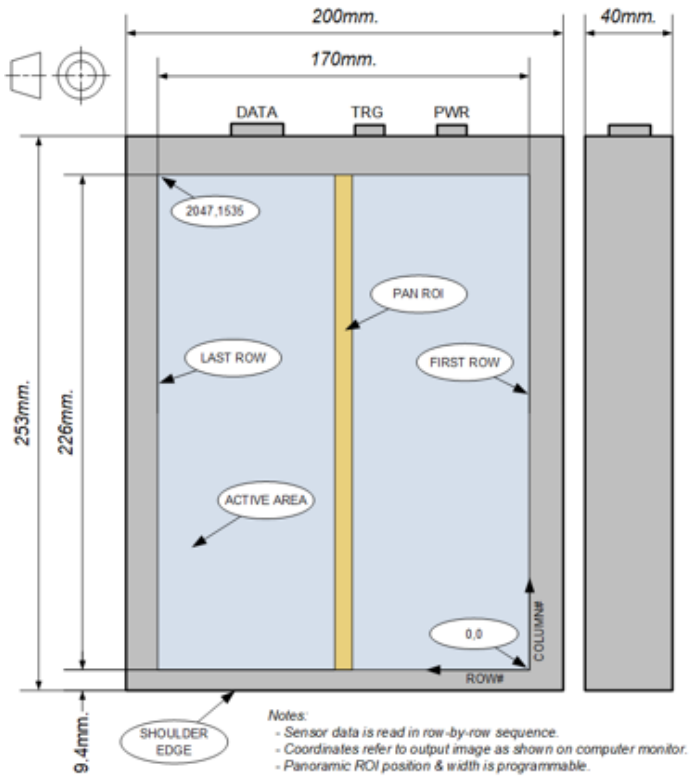
SPECIFICATIONS

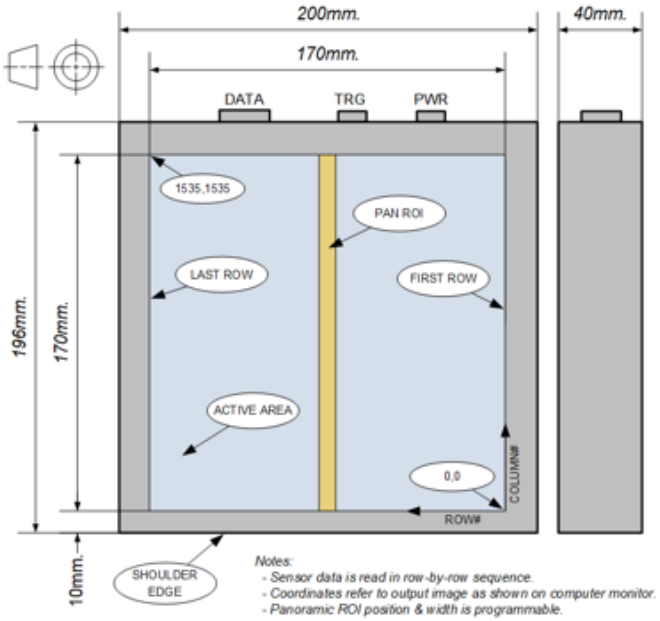
Parameter	Specification (RQA5)	
	Axios-2317	Axios-1717
Sensor Technology	IGZO TFT with photodiode	
Scintillator	Medical grade columnar CsI	
Pixel Pitch	110.5 µm	
Active Area	226 x 170 mm^2	170 x 170 mm^2
Resolution	2048 x 1536 pixels	1536 x 1536 pixels
Binning Support	1 x 1 / 2 x 2	
Saturation Dose @ high/low gain (typical)	4 µG / 17 µGy	
MTF @ 1, 2 lp/mm	58% / 28%	
DQE @ 0 lp/mm (typical)	73%	
ADC Conversion	16 bit (65,536 levels)	
Data Interface	NBASE-T (up to 5 Gbps)	
Trigger Modes	Internal / External (hardware, software)	
Frame Rate (maximum) • Full Resolution (1 x 1), full area • Binning (2 x 2), full area • Full Resolution (1 x 1), ROI 225 x 7 mm^2	 40 fps 80 fps 400 fps	
ROI Readout	Programmable	
Image Lag (0.1 s) @ 30 fps (typical)	1%	
Life Time Dose	1000 Gy	
X-Ray Energy Range	40-125 kV	
Power Supply	11-28 Vdc	
Power Consumption • Active • Standby	 21 W 12 W	
Dimensions (L x W x H)	253 x 200 x 40 mm^3	196 x 200 x 40 mm^3
Weight	3.2 kg	2.6 kg

SPECIFICATIONS









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Revision Date: 2022 11 16