

Shark3030FDM

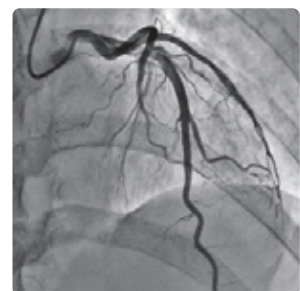
IGZO X-ray flat panel detector



Key Features

- Embedded image calibration feature for easy integration
- Pixel pitch 148 μm
- Low-noise, excellent dynamic image even at a low dose
- High speed without image delay
- The frame rate of Max. 30 fps (1x1) and Max. 60 fps (2x2)
- Direct deposition Cesium Iodide (CsI) Scintillator effectively reduces light scattering between pixels

Shark3030FDM is a 30 x 30 cm fixed type, dynamic flat panel detector based on Indium Gallium Zinc Oxide technology. The advanced IGZO TFT with CsI Scintillator provides an ultra low-noise image at a low dose and a high acquisition frame rate. It features excellent sensitivity and high dynamic range modes for high-end applications including cardiac and cerebral angiography. Shark3030FDM structural design effectively reduces the bending radius of the detector outlet, shortening the wiring space for easy installation and integration of systems. It performs well in C-arm systems .



Technical Specifications

Technology	
Sensor	IGZO
Scintillator	CSI
Active Area	303 x 303 mm
Pixel Matrix	2048 x 2048
Pixel Pitch	148 μm
AD Conversion	16 bits
Interface	
Data Interface	10G Ethernet
Exposure Control	Pulse Sync In / Pulse Sync Out
Work Mode	Software Mode / HVG Sync Mode / FPD Sync Mode
Frame Speed	30 fps (1x1) / 60fps (2x2)
Operating System	Windows7 / Windows10 OS 32 bits or 64 bits
Technical Performance	
Resolution	3.37 lp/mm
Energy Range	40~160 KV
Lag	0.8% @ 1st frame
Dynamic Range	≥88 dB
Sensitivity	740 lsb/uGy
SNR	50dB @ (20000lsb)
MTF	70% @ (1 lp/mm) 42% @ (2 lp/mm) 23% @ (3 lp/mm)
DQE (2uGy)	68% @ (0 lp/mm) 43% @ (1 lp/mm) 28% @ (2 lp/mm)
Mechanical	
Dimension(H x W x D)	344 x 341 x 28 mm
Weight	4.2 Kg
Sensor Protection Material	Carbon Fiber
Housing Material	Aluminum Alloy
Environmental	
Temperature Range	10~35°C (operating) ; -10~50°C (storage)
Humidity	30~70% RH (non-condensing)
Vibration	IEC/EN 60721-3 class 2M3 (10~150 Hz, 0.5 g)
Shock	IEC/EN 60721-3 class 2M3 (11 ms, 2 g)
Dust and Water Resistant	IPX0
Power	
Supply	100~240 VAC
Frequency	50/60 Hz
Consumption	12 W

