

Whale4343FOI

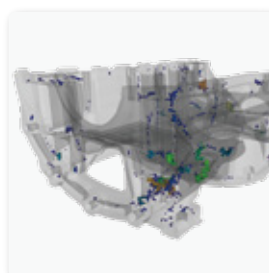
a-Si X-ray flat panel detector



Key Features

- Pixel pitch 140 μm
- Low-noise, excellent dynamic image even at a low dose
- High speed without image delay
- The frame rate 24fps
- Direct deposition Cesium Iodide (CsI) Scintillator effectively reduces light scattering between pixels

Whale4343FOI is a 43 x 43cm fixed type, dynamic flat panel detector based on a-Si technology. The advanced a-Si TFT 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. It is an optimal solution for industrial CT, casting, pipe welding and pressure container.



Technical Specifications

Technology	
Sensor	a-Si
Scintillator	GOS / CSI
Active Area	430 x 430 mm
Pixel Matrix	3072 x 3072
Pixel Pitch	140 μm
AD Conversion	16 bits
Interface	
Data Interface	Optical Fiber
Exposure Control	Pulse Sync In / Pulse Sync Out
Work Mode	Software Mode / HVG Sync Mode / FPD Sync Mode
Frame Speed	24 fps (1×1)
Operating System	Windows7 / Windows10 OS 32 bits or 64 bits
Technical Performance	
Resolution	3.5 lp/mm
Energy Range	40~160 KV / 350 KV
Lag	0.8% @ 1st frame
Dynamic Range	$\geq 86\text{dB}$
Sensitivity	620 lsb/uGy
SNR	49 dB @ (20000lsb)
MTF	72% @ (1 lp/mm)
	44% @ (2 lp/mm)
	25% @ (3 lp/mm)
DQE (2uGy)	66% @ (0 lp/mm)
	42% @ (1 lp/mm)
	28% @ (2 lp/mm)
Mechanical	
Dimension(H x W x D)	470 x 470 x 32.5 mm
Weight	9.5 kg / 15.5kg
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	20W

