

Whale4343FQM

a-Si X-ray flat panel detector



Key Features

- Pixel size 140 μm
- Low-noise, excellent dynamic image even at a low dose
- High speed without image delay
- The frame rate of Max. 12 fps (1x1) and Max. 24 fps (2x2)
- Direct deposition Cesium Iodide (CsI) Scintillator effectively reduces light scattering between pixels

Whale4343FQM 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 digital fluoroscopy and dynamic DR.



Technical Specifications

Technology	
Sensor	A-si
Scintillator	CSI / GOS
Active Area	430 x 430 mm
Pixel Matrix	3072 x 3072
Pixel Pitch	140 μ m
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	12 fps (1x1) / 24 fps (2x2)
Operating System	Windows7 / Windows10 OS 32 bits or 64 bits
Technical Performance	
Resolution	3.5 lp/mm
Energy Range	40~160 KV
Lag	0.8% @ 1st frame
Dynamic Range	\geq 86dB
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 30 mm
Weight	5.0 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	14W

