

Whale3030FQM

a-Si X-ray flat panel detector



Key Features

- Large area imaging, no edge image distortion
- The frame rate of Max. 8 fps (1x1) and Max. 16 fps (2x2)
- Sensitivity comparable to image intensifiers
- Better dynamic range and image signal-to-noise ratio than image intensifier

Whale3030FQM is a 30 x 30 cm real-time, fixed amorphous silicon, digital X-ray flat panel detector. It features excellent sensitivity and high dynamic range modes. The Whale3030FQM structural design effectively reduces the bending radius of the detector outlet, shortening the wiring space for easy installation and integration of systems. Its embedded firmware image calibration minimizes the difficulty of software development and resource consumption for computer hardware configuration. Suitable for bone densitometry.



Technical Specifications

Technology	
Sensor	A-Si
Scintillator	CSI / GOS
Active Area	286 x 286 mm
Pixel Matrix	2048 x 2048
Pixel Pitch	140 μ m
AD Conversion	16 bits
Interface	
Data Interface	Gigabit Ethernet
Exposure Control	Pulse Sync In / Pulse Sync Out
Frame Speed	8 fps (1x1) / 16 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 86 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)	322 x 322 x 50.5 mm
Weight	3.0 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	10 W

