

Whale4343FQI

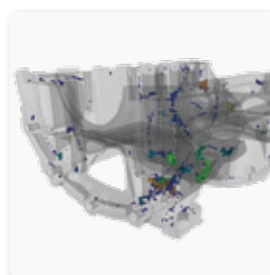
a-Si X-ray flat panel detector



Key Features

- Pixel pitch 140 μm
- Active Area 430×430mm
- The frame rate of Max. 12 fps (1x1) , Max. 24 fps (2x2)
- High dynamic range and a long lifetime among other benefits

Whale4343FQI is a fixed type and low noise X-ray flat panel detector. It is based on amorphous silicon (a-Si) technology that features a high dynamic range and a long lifetime among other benefits. Whale4343FQI has good image quality and a large dynamic range. Furthermore, it comes with multiple gain modes, that make it compatible with both high sensitivity and large dynamic range requirements. Optimized for industrial CT, casting, pipe welding applications.



Technical Specifications

Technology

Sensor	a-Si
Scintillator	GOS / CSI
Active Area	430 x 430 mm
Pixel Matrix	3072 x 3072
Pixel Pitch	140 μ m
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	12fps(1x1) / 24fps(2x2)
Operating System	Windows7 / Windows10 OS 32 bits or 64 bits

Technical Performance

Resolution	3.5 lp/mm
Energy Range	40~160KV / 350KV
Lag	0.8% @ 1st frame
Dynamic Range	≥ 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)	470 x 470 x 34 mm
Weight	9.5 kg / 13 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	14 W

