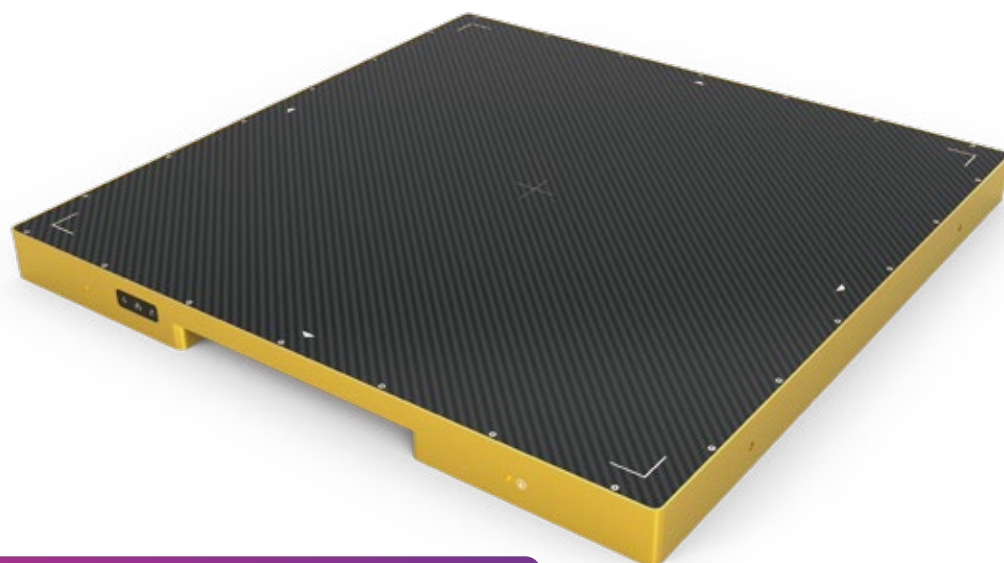


# Whale4343FQI-X

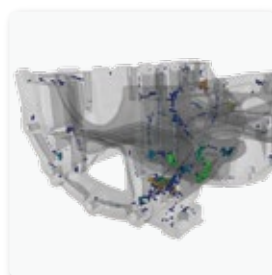
a-Si X-ray flat panel detector



## Key Features

- Pixel pitch 100  $\mu\text{m}$
- Active Area 430 $\times$ 430mm
- The frame rate of Max. 8 fps (1x1) , Max. 15 fps (2x2)
- High dynamic range and a long lifetime among other benefits

Whale4343FQI-X 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-X 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 , pressure container, lithium battery applications.



# Technical Specifications

Technology	
Sensor	a-Si
Scintillator	GOS / CSI
Active Area	430 x 430 mm
Pixel Matrix	4288 x 4288
Pixel Pitch	100 $\mu$ 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	8fps (1x1) / 15fps (2x2)
Operating System	Windows7 / Windows10 OS 32 bits or 64 bits
Technical Performance	
Resolution	5.0 lp/mm
Energy Range	40~160KV / 350KV
Lag	0.8% @ 1st frame
Dynamic Range	$\geq$ 76dB
Sensitivity	360 lsb/uGy
SNR	47 dB @ (20000lsb)
MTF	75% @ (1 lp/mm) 48% @ (2 lp/mm) 29% @ (3 lp/mm)
DQE (2uGy)	64% @ (0 lp/mm) 38% @ (1 lp/mm) 21% @ (2 lp/mm)
Mechanical	
Dimension(H x W x D)	470 x 470 x 34.5 mm
Weight	10.1 kg / 12.7 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	18 W

