

Whale4343PSI

a-Si X-ray flat panel detector



Key Features

- 140 μm pixel pitch
- Superior image quality
- Human bionic structural design
- Direct deposition Cesium Iodide (CsI) Scintillator effectively reduces light scattering between pixels

Whale4343PSI is a 43 x 43 cm portable type, amorphous silicon based static flat panel detector. With a 140 μm pixel pitch, it provides superior image quality and high image signal-to-noise ratio. Features excellent sensitivity and high dynamic range modes. It conforms to the structural design of human bionics, and is an optimal solution for security (EOD).



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	Gigabit Ethernet
Exposure Control	Prepare / Ready / X Ray On(Edge or Level)
Image Acquisition Time	≤ 1 s
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	≥ 86 dB
Sensitivity	540 lsb/uGy
SNR	48 dB @ (20000lsb)
MTF	72% @ (1 lp/mm)
	44% @ (2 lp/mm)
	25% @ (3 lp/mm)
DQE (2uGy)	64% @ (0 lp/mm)
	41% @ (1 lp/mm)
	28% @ (2 lp/mm)
Mechanical	
Dimension(H x W x D)	460 x 460 x 15 mm
Weight	4.6 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	IP54
Power	
Supply	100~240 VAC
Frequency	50/60 Hz
Consumption	14 W

