

# Whale3543PSM

a-Si X-ray flat panel detector



## Key Features

- 140  $\mu\text{m}$  pixel pitch
- Superior image quality
- Human bionic structural design
- Direct deposition Cesium Iodide (CsI) Scintillator effectively reduces light scattering between pixels

Whale3543PSM is a 35 x 43 cm portable type, amorphous silicon based static flat panel detector. With a 140  $\mu\text{m}$  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 medical DR and radiography.



# Technical Specifications

Technology	
Sensor	A-Si
Scintillator	CSI / GOS
Active Area	350 x 427 mm
Pixel Matrix	2500 x 3052
Pixel Pitch	140 $\mu$ m
AD Conversion	16 bits
Interface	
Data Interface	Gigabit Ethernet
Exposure Control	Prepare / Ready / X Ray On(Edge or Level)
Image Acquisition Time	$\leq 1$ 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	$\geq 86$ dB
Sensitivity	540 lsb/uGy
SNR	48 dB @ (20000lsb)
MTF	72% @ (1 lp/mm)
	44% @ (2 lp/mm)
	25% @ (3 lp/mm)
	64% @ (0 lp/mm)
	41% @ (1 lp/mm)
DQE (2uGy)	28% @ (2 lp/mm)
Mechanical	
Dimension(H x W x D)	460 x 383 x 15 mm
Weight	3.8 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	13 W

