

Whale2530FSI

Fixed X Ray Detector



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Whale2530FSI production is a fixed type and low noise x ray flat panel detector based on amorphous silicon technology. A-Si technology based detector owns many advantages that are unavailable with other technology, Whale2530FSI production takes a high image quality and a large dynamic range, also Whale2530FSI possesses multi-gain stage, this function makes it possible that the detector can both be suitable for high sensitivity and large dynamic range requirements. Based on above characteristics, Whale2530FSI detector can be widely used in medical, industrial, veterinary, and research application area.

Key features for amorphous silicon technology:

- ◆ Large dose dynamic range
- ◆ Long life time

Key Features

- Pixel Pitch: 85 μm
- Pixel Matrix: 2816 x 3584
- ADC: 16-bit
- Gain Stage: Multi-Gain
- Scintillator: GOS/CSI
- Water Proof: IPX0
- Interface: Gigabit Ethernet
High voltage generator
Power
- Calibration: Software, Firmware
- Radiation Hardness: $\geq 10000\text{Gy}$

Application

- Medical
- Industry
- Veterinary
- Research

Technology	
Sensor	a-Si
Scintillator	GOS / CSI
Active Area	239 x 304 mm
Pixel Matrix	2816 x 3584
Pixel Pitch	85 μm
AD Conversion	16 bits
Interface	
Communication Interface	Gigabit Ethernet
Exposure Control	Trigger In(Edge or Level) / Trigger Out (Edge or Level)
Image Acquisition Time	≤ 1 seconds
Operating System	Windows7 / Windows10 OS 32 bit or 64 bit
Technical Performance	
Resolution	5.8 lp/mm
Energy Range	40~160 KV
Lag	<1% 1st frame
Dynamic Range	≥ 86 dB
Sensitivity	67 lsb/uGy
SNR	45 dB @(20000lsb)
MTF	76% @(1 lp/mm) 47% @(2 lp/mm) 27% @(3 lp/mm)
DQE	60% @(0 lp/mm) 54% @(1 lp/mm) 48% @(2 lp/mm)
Mechanical	
Dimension(H x W x D)	334 x 273.5 x 34 mm
Weight	2.1 Kg
Sensor Protection Material	Carbon Fiber
Housing Material	High Strength 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	12 W

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