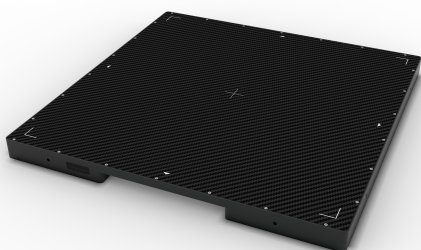


# Shark4343FPI

## Fixed Type X Ray Detector



## Shark4343FPI X Ray Detector

Shark4343FPI production is a fixed type and low noise x ray flat panel detector based on Indium Gallium Zinc Oxide technology. IGZO technology based detector owns many advantages that are unavailable with other technology, Shark4343FPI production takes a high image quality, frame speed, and a large dynamic range, also Shark4343FPI 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, Shark4343FPI detector can be widely used in medical, industrial, veterinary, and research application area.

Key features for IGZO technology:

- ◆ High frame speed
- ◆ High image quality

### Key Features

- Pixel Pitch: 140  $\mu$ m
- Pixel Matrix: 3072 x 3072
- ADC: 16-bit
- Gain Stage: Multi-Gain
- Scintillator: CSI/GOS
- Water Proof: IPX0
- Interface: Optical Fiber  
High voltage generator  
Power
- Calibration: Firmware

### Application

- Medical
- Industry
- Veterinary
- Research

#### Technology

Sensor	IGZO
Scintillator	CSI / GOS
Active Area	430 x 430 mm
Pixel Matrix	3072 x 3072
Pixel Pitch	140 $\mu$ m
AD Conversion	16 bits

#### Interface

Communication Interface	Optical Fiber
Exposure Control	Pulse Sync In (Edge or Level) / Pulse Sync Out (Edge or Level)
Mode	Software Mode / HVG Sync Mode / FPD Sync Mode
Frame Speed	20fps
Operating System	Windows7 / Windows10 OS 32 bit or 64 bit

#### Technical Performance

Resolution	3.5 lp/mm
Energy Range	40~160 KV
Lag	$\leq$ 0.5% 1st frame
Dynamic Range	$\geq$ 88dB
Sensitivity	560 lsb/uGy
SNR	50 dB @(20000lsb)
MTF	65% @(1 lp/mm) 35% @(2 lp/mm) 20% @(3 lp/mm)
DQE (2uGy)	60% @(0 lp/mm) 43% @(1 lp/mm) 28% @(2 lp/mm)

#### Mechanical

Dimension(H x W x D)	470 x 470x 30 mm
Weight	5 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

#### Regulatory

CFDA (China)	
FDA (USA)	
CE (Europe)	

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