

X-PANEL[®] 4343a FQI



Fixed a-Si-TFT X-ray flat panel detector



Benefits

- Robust design for 24/7 industrial operations
- High speed and large field of view
- Easy to use and integrate
- Versatile configurations
- Adaptive imaging

Key features

- | | |
|----------------|-----------------------------|
| • Technology | a-Si-TFT |
| • Pixel size | 140 µm |
| • Pixel matrix | 3072 x 3072 |
| • Pixel area | 430 x 430 mm |
| • Energy range | 40-160 / 350 / 450 kV |
| • Interface | Optical fiber |
| • Frame rate | 12 fps (1x1) / 24 fps (2x2) |



Introducing the **X-Panel 4343a FQI**, a robust flat panel detector designed for 24/7 industrial operations. With its durable and stable build, this cutting-edge detector excels in high-performance speed and large field of view, ideal for industries requiring swift and precise imaging.

The X-Panel 4343a FQI stands out with its ease of use, ensuring seamless integration for professionals and newcomers alike. This flat panel detector streamlines operations, providing a hassle-free experience for users of all expertise levels.

Emphasizing versatility, the X-Panel 4343a FQI offers configurable options and adaptive imaging. Tailor the detector to meet your application's specific needs, adjusting configurations for optimal results. This adaptability positions the X-Panel 4343a FQI as a versatile solution for various industrial imaging scenarios.

Technical specifications

Technology	
Sensor	a-Si-TFT
Scintillator	GOS / CSI
Active area	430 x 430 mm
Pixel matrix	3072 x 3072
Pixel pitch	140 µm
AD conversion	16 bits

Interface	
Communication interface	Optical fiber
Exposure control	Pulse sync in / Pulse sync out
Frame speed	12 fps (1x1) / 24 fps (2x2)
Operating system	Windows7 / Windows10 OS 32 bits or 64 bits

Mechanical	
Dimensions (H x W x D)	470 x 470 x 34 mm
Weight	13 kg
Sensor protection material	Carbon fiber
Housing material	Aluminum alloy

Power	
Supply	100~240 VAC
Frequency	50/60 Hz
Consumption	14 W

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)
Ingress protection rating	IP41

Technical performance	
Resolution	3.5 lp/mm
Energy range	40~450 kV
Lag	<0.8% @1st frame
Dynamic range	≥ 86 dB
Sensitivity	620 lsb/uGy
SNR	49 dB @ (20000 lsb)
MTF	72% @ (1 lp/mm)
	44% @ (2 lp/mm)
	25% @ (3 lp/mm)
DQE (2.2uGy)	66% @ (0 lp/mm)
	42% @ (1 lp/mm)
	28% @ (2 lp/mm)

Applications

- Industrial CBCT
- Non-destructive testing (NDT)

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