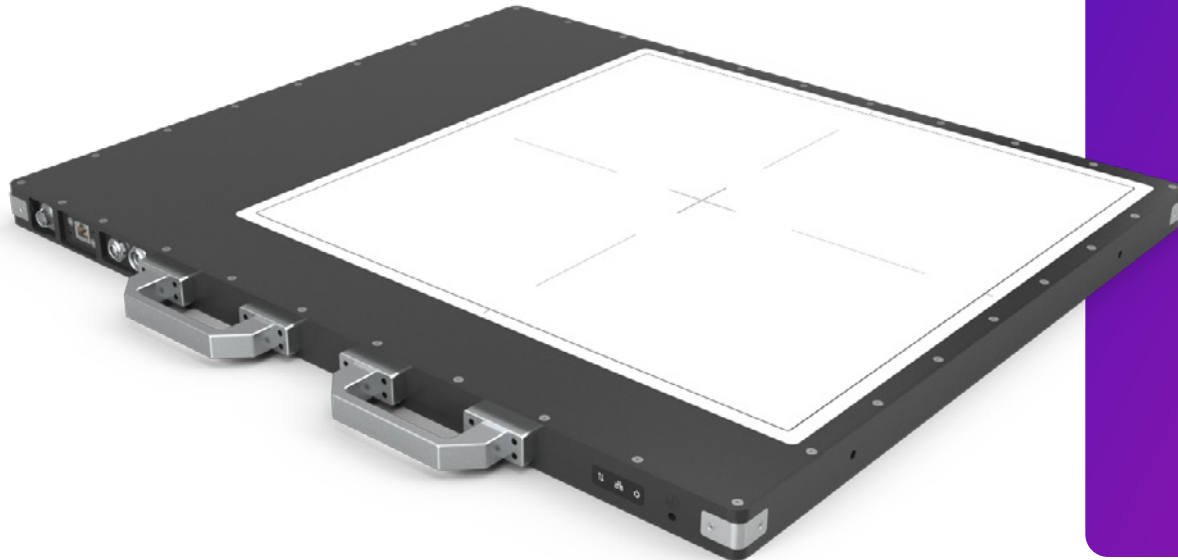


# X-PANEL<sup>®</sup> 4343a FQI-H



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



## Key features

- **Technology** a-Si-TFT
- **Pixel size** 140  $\mu\text{m}$
- **Pixel matrix** 3072 x 3072
- **Pixel area** 430 x 430 mm
- **Energy range**  $\leq 16$  MV
- **Interface** Optical fiber
- **Frame rate** 12 fps (1x1) / 24 fps (2x2)
- **Application** High-energy NDT



**X-Panel 4343a FQI-H** is a fixed type and low noise X-ray flat panel detector optimized for industrial high-energy non-destructive testing (NDT) applications. It is based on amorphous silicon (a-Si) technology that features a high dynamic range and a long lifetime among other benefits.

X-Panel 4343a FQI-H has good image quality and a large dynamic range. Furthermore, it features state-of-the-art radiation hardness. It comes with multiple gain modes, that make it compatible with both high sensitivity and large dynamic range requirements.

## 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 (Edge or level) / Pulse sync out (Edge or level)
Work mode	Software mode / HVG sync mode / FPD sync mode
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)	630 x 540 x 30 mm
Weight	15 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	IP65

Technical performance	
Resolution	3.5 lp/mm
Energy range	≤16 MV
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)

# X-Panel 4343a FQI-H outline

