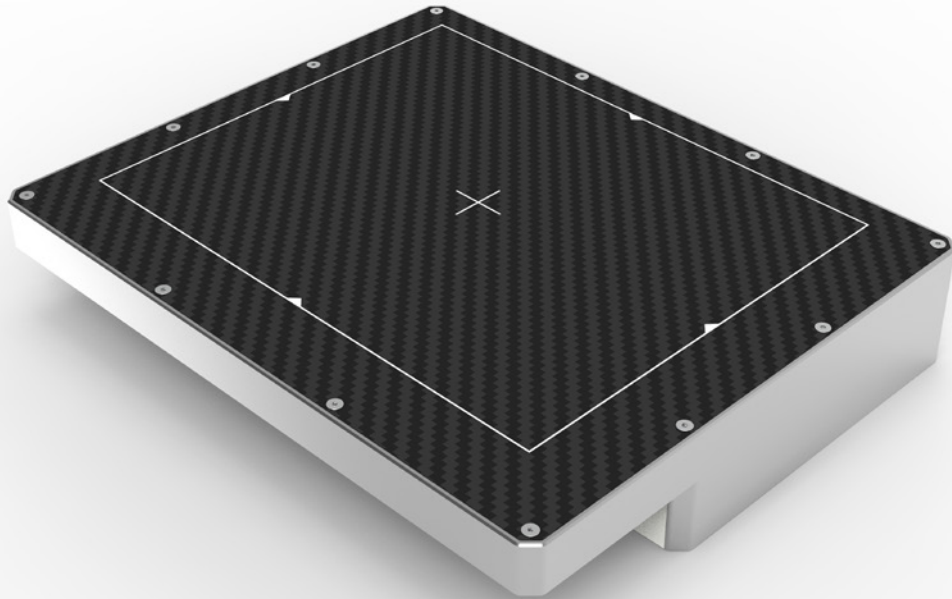


X-PANEL[®] 1613a FDI



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



Key features

- **Technology** a-Si-TFT
- **Pixel size** 125 μm
- **Pixel matrix** 1024 x 1248
- **Pixel area** 160 x 128 mm
- **Energy range** 40 kVp ~ 160 kVp
- **Interface** Gigabit Ethernet
- **Frame rate** 30 fps
- **Applications** Nondestructive testing (NDT)
Electronics inspection
Battery inspection



X-Panel 1613a FDI is a fixed type and low noise X-ray flat panel detector optimized non-destructive testing (NDT), electronics and battery inspection. It is based on amorphous silicon (a-Si) technology that features a high dynamic range and a long lifetime among other benefits.

X-Panel 1613a FDI has good image quality and a large dynamic range. Furthermore, 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	160 x 128 mm
Pixel matrix	1024 x 1248
Pixel pitch	125 µm
AD conversion	16 bits

Interface	
Communication interface	Gigabit Ethernet
Exposure control	Pulse sync in (edge or level) / Pulse sync out (edge or level)
Modes	Software mode / HVG sync mode / FPD sync mode
Frame Speed	30 fps
Operating system	Windows7 / Windows10 OS 32 bits or 64 bits

Mechanical	
Dimensions (HxWxD)	196 x 162 x 37.5 mm
Weight	1.5 kg
Sensor protection material	Carbon fiber
Housing material	Aluminum alloy

Power	
Supply	100~240 VAC
Frequency	50/60 Hz
Consumption	8 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	4.0 lp/mm
Energy range	40~160 kV
Lag	0.8% 1st frame
Dynamic range	≥86 dB
Sensitivity	460 lsb/µGy
SNR	49 dB @ (20000 lsb)
	75% @ (1 lp/mm)
MTF	46% @ (2 lp/mm)
	27% @ (3 lp/mm)
DQE	58% @ (0 lp/mm)
	43% @ (1 lp/mm)
	30% @ (2 lp/mm)

X-Panel 1613a FDI outline

