

THINK BIG

Then double it.

X-PANEL[®] 43108a

The largest dynamic
single-glass TFT detector



X-PANEL 43108a FQI

a-Si-TFT X-ray flat panel detector



Key features

- **Technology** Single-glass a-Si-TFT
- **Pixel size** 140 μm
- **Pixel matrix** 3072 x 7680
- **Panel size** 430 mm x 1075 mm
- **Energy range** 40 kV~16 MV
- **Interface** 10G Ethernet
- **Frame rate** 7.5 fps (1x1) / 15 fps (2x2) / 22.5 fps (3x3) / 30 fps (4x4)
- **Applications** High-Energy NDT with X-ray Tube or Linac

X-Panel 43108a FQI-TG-H is a large-format dynamic flat panel Digital Detector Array (DDA) for high-energy NDT applications. It is designed for X-ray tube applications up to 750 kV and Linear Accelerator applications up to 16 MeV by placing detector electronics outside the active area. With an active area of 43 x 108 cm, X-Panel 43108a FQI-TG-H allows inspection of large-scale industrial components with a single scan, drastically reducing imaging time and improving throughput. It caters to various industries, including automotive, aerospace, heavy machinery, defence and general manufacturing.

Technical specifications

Technology	
Sensor	Single-glass a-Si-TFT
Scintillator	DRZ-High (kV version), DRZ-High with Cu filter (MV version)
Active area	430 mm x 1075 mm
Pixel matrix	3072 x 7680
Pixel pitch	140 μm
ADC	16 bits

Interface	
Data interface	10G Ethernet
Exposure control	Pulse sync in / Pulse sync out
Frame rate	7.5 fps (1x1) / 15 fps (2x2) / 22.5 fps (3x3) / 30 fps (4x4)
Operating system	Windows10

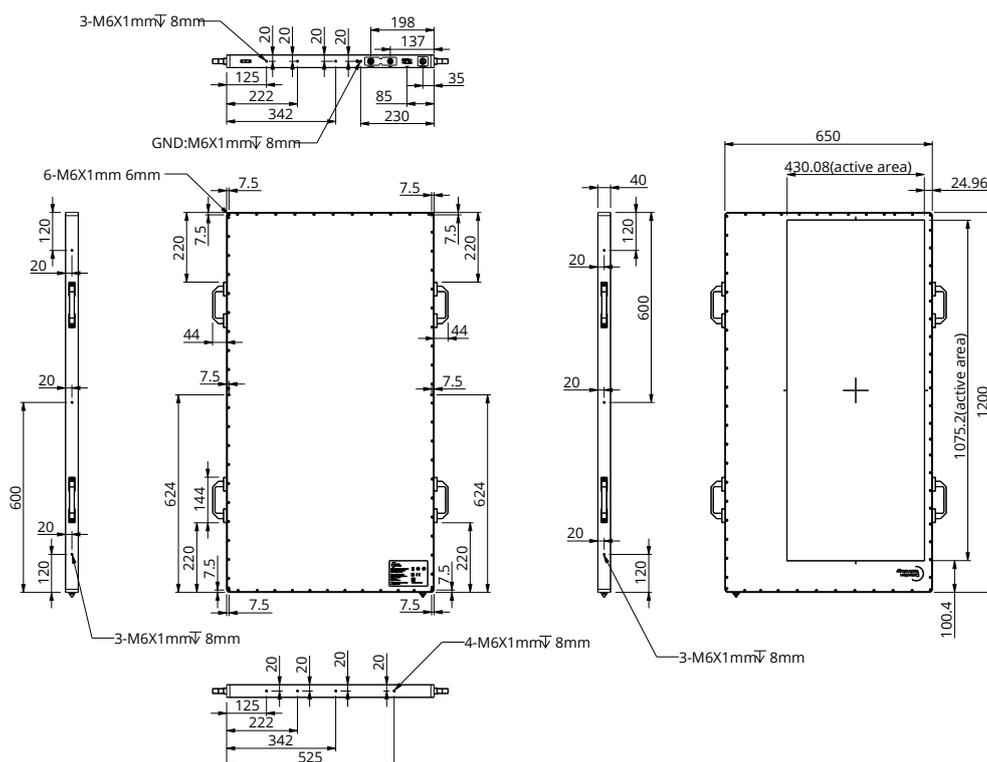
Mechanics	
Dimensions (H x W x D)	1200 x 650 x 40 mm
Weight	35 kg
Sensor protection	Carbon fiber
Housing material	Aluminum alloy

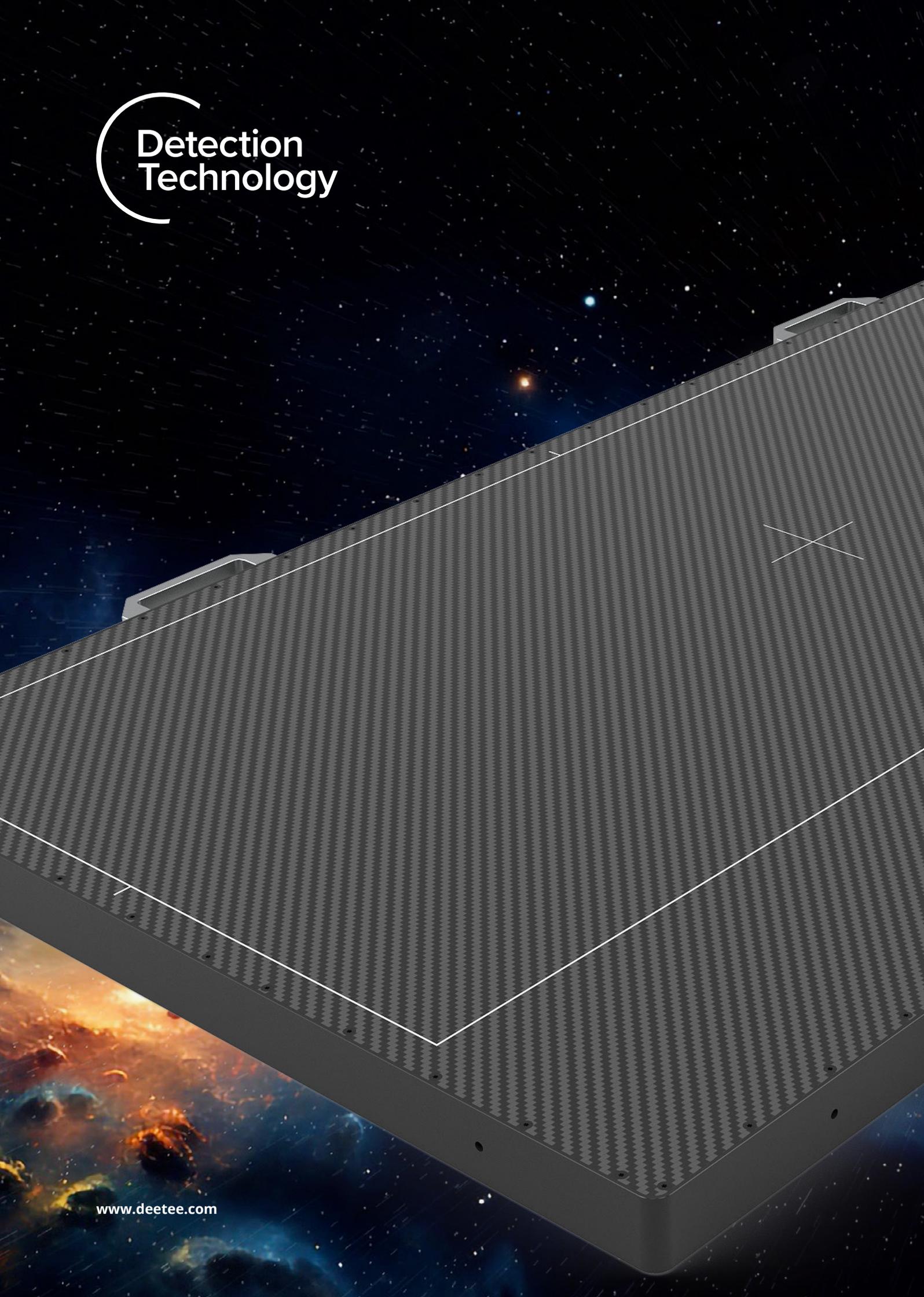
Power	
Supply	100~240 VAC
Frequency	50/60 Hz
Consumption	35 W

Environmental	
Temperature range	10~35°C (operating); -10~50°C (storage)
Humidity	30~70% RH (non-condensing)
Vibration	IEC 60068-2-64 : 5-500Hz (1 Grms, X,Y,Z axis, each axis 30min (operating)
Shock	IEC 60068-2-27 : 2G, duration 11ms , 200 shocks in 6 directions (operating)
IP rating	IP65

Performance	
Resolution	3.4 lp/mm
Energy range	40 kV ~ 16 MV
Shielding	External shielding required for energies above 160 kV
Dynamic range	≥ 82 dB

X-Panel 43108a FQI-TG-H outline





Detection
Technology