X-Panel 1313z FDI

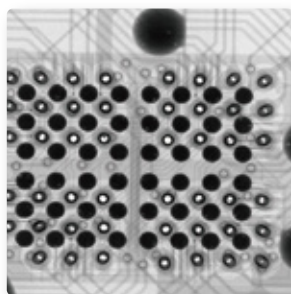**IGZO X-ray flat panel detector**

Key Features

- 85 μm pixel pitch
- Excellent sensitivity and high dynamic range modes
- Fast frame rate 35 fps (1x1)
- CsI scintillator offers lower dose and high image quality

X-Panel 1313z FDI is a low noise X-ray flat panel detector optimized for SMT and battery inspection application. It is based on Indium Gallium Zinc Oxide (IGZO) technology that supports a fast frame rate among other benefits.

X-Panel 1313z FDI has excellent image quality and 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	IGZO
Scintillator	CsI
Active Area	128.52 x 128.52 mm
Pixel Matrix	1536 x 1536
Pixel Pitch	85 µm
AD Conversion	16 bits

Interface	
Data Interface	2.5G Ethernet
Exposure Control	Pulse Sync In / Pulse Sync Out
Frame Speed	35fps (1x1)
Operating System	Windows7 / Windows10 OS 32 bits or 64 bits

Technical Performance	
Resolution	5.8 lp/mm
Energy Range	40~160KV / 350KV
Lag	0.8% @ 1st frame
Dynamic Range	≥75 dB
Sensitivity	480 lsb/uGy
SNR	45 dB @ (20000lsb)
MTF	75% @ (1 lp/mm)
	50% @ (2 lp/mm)
	32% @ (3 lp/mm)
DQE（2uGy）	60% @ (0 lp/mm)
	45% @ (1 lp/mm)
	30% @ (2 lp/mm)

Mechanical	
Dimension(H x W x D)	176 x 176 x 35 mm
Weight	1.5 kg / 2.8 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 60068-2-64 Operation: 1G, 5-500Hz
Shock	IEC 60068-2-27 Operation: 2G, duration 11ms
Dust and Water Resistant	IPX0

Power	
Supply	100~240 VAC
Frequency	50/60 Hz
Consumption	12 W