

X-Panel 4343a PSI

a-Si X-ray flat panel detector



Key Features

- 140 μm pixel pitch
- Superior image quality
- Human bionic structural design
- Direct deposition Cesium Iodide (CsI) Scintillator effectively reduces light scattering between pixels

X-Panel 4343a PSI is a 43 x 43 cm portable type, amorphous silicon based static flat panel detector. With a 140 μm pixel pitch, it provides superior image quality and high image signal-to-noise ratio. Features excellent sensitivity and high dynamic range modes. It conforms to the structural design of human bionics, and is an optimal solution for security (EOD).



Technical Specifications

| Technology | |
|----------------------------|---|
| Sensor | a-Si |
| Scintillator | CsI / GOS |
| Active Area | 430 x 430 mm |
| Pixel Matrix | 3072 x 3072 |
| Pixel Pitch | 140 μ m |
| AD Conversion | 16 bits |
| Interface | |
| Data Interface | Gigabit Ethernet |
| Exposure Control | Prepare / Ready / X Ray On(Edge or Level) |
| Image Acquisition Time | ≤ 1 s |
| Operating System | Windows7 / Windows10 OS 32 bits or 64 bits |
| Technical Performance | |
| Resolution | 3.5 lp/mm |
| Energy Range | 40~160 KV |
| Lag | 0.8% @ 1st frame |
| Dynamic Range | ≥ 86 dB |
| Sensitivity | 540 lsb/uGy |
| SNR | 48 dB @ (20000lsb) |
| MTF | 72% @ (1 lp/mm) 44% @ (2 lp/mm) 25% @ (3 lp/mm) |
| DQE (2uGy) | 64% @ (0 lp/mm) 41% @ (1 lp/mm) 28% @ (2 lp/mm) |
| Mechanical | |
| Dimension(H x W x D) | 460 x 460 x 15 mm |
| Weight | 4.6 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 | IP41 |
| Power | |
| Supply | 100~240 VAC |
| Frequency | 50/60 Hz |
| Consumption | 12.5 W |

