Product Description

The PaxScan 4343DX-I is designed for demanding industrial x-ray imaging applications, providing framerates up to 25 fps in full frame 3x3 binning mode. It is the latest generation, high dynamic range 3k by 3k sensor and yields ASTM-2597 detector resolutions on the order of 150µm. Tube energies up to 320 kV may be used. The 4343DX-I has been designed to provide maximum imaging area and radiation hardness with minimum footprint.

Technical Specifications

Receptor Type ..................... Amorphous Silicon
Conversion Screen .................. DRZ Standard, CsI:Tl
Pixel Area - Total ................. 42.7cm (h) x 42.7cm (v) (16.8 x 16.8 in)
Pixel Matrix - Total ................ 3,072 (h) x 3,072 (v)
Effective ........................... 3,052 (h) x 3,052 (v)
Pixel Pitch ......................... 139 µm
Limiting Resolution ................. 3.6 lp/mm @ 4 fps (1 x 1)
SRb (with DRZ Standard) .......... 152 µm*
Efficiency (DRZ Standard/aluminum/SNR@1 mGy) ........ 550*
Quantum-limited Dose (2x2) ........ 8 nGy /frame
Energy Range ....................... 40 - 320 kV
Fill Factor .......................... 60%
Lag .................................. <3% (first frame)
Scan Method ....................... Progressive
Data Output ........................ Gigabit Ethernet
A/D Conversion ....................... 16-bit
Cooling ................................ Passive
Radiation Tolerance ................. >10 kGy (1MRad)
* According to ASTM E2597-14 with DRZ standard

Power Requirements

Power Requirements .......................... 18 watts (cont.) 25 watts (max.)
Power Supply/Adaptor ................. 100-240 VAC, 50-60 Hz

Mechanical

Weight ................................. approx. 19.2 kg (43 lbs)
Housing Material ..................... Aluminum
Sensor Protection ..................... Carbon fiber and aluminum
Mounting Provisions  .................. Blind, threaded mounting holes on the back.

Image Acquisition Modes (Current)

Fluoro: 3072 x 3072 (1x1) 4fps
1536 x 1536 (2x2) 15fps
1024 x 1024 (3x3) 25fps
1024 x 1024 (1x1) center zoom 15 fps

Additional Modes: Consult Varex Imaging Corporation

Environmental

Temperature Limit ...................... -10 - 40°C
Relative Humidity ..................... 10 - 90% Non-Condensing
Atmospheric Pressure .................. 70 kPa - 106 kPa
Shock Tolerance ...................... 20G (any direction no power applied)

Regulatory

U.S. .............................. UL 61010-1:2012
Canada ......................... CAN/CSA-C22.2 No. 61010-1:2012
Europe ........................... EN 61010-1:2010

*PaxScan is a Registered Trademark of Varex Imaging Corporation
Dimensions are for reference only
Dimensions are in mm [inches]
Detector Characterization Charts in accordance with ASTM E2597-14 Standard Practice for the Manufacturing Characterization of Digital Detector Arrays

NOTE: SMTR, CS and Lag quality numbers all improve with higher frame rate. Spider charts based on DRZ standard Scintillator.

**Aluminum 6061**

**Inconel 718**

**Titanium 6Al4V**
Note: All Varex Imaging Amorphous Silicon Receptors are designed to be integrated into a complete X-ray system by a qualified system integrator. The system integrator is responsible for obtaining FDA clearance for medical use.

Manufactured by Varex Imaging Corporation
Specifications subject to change without notice.