Product Description

The PaxScan® 3030X (version 3) is a real-time digital X-ray imaging device commonly referred to as a flat panel detector (FPD). The main system components are the 30 x 30cm 194μm-pixel amorphous silicon FPD and Command Processor CP2LC. Excellent low-dose performance is achieved by combining Varex Imaging’s proprietary readout electronics with a custom Cesium Iodide scintillator. A Windows® based application program and a communications command (DLL) library has also been developed to assist OEM customers tasked with developing their own system interface. This imager is intended for incorporation into a complete X-ray system by a qualified equipment manufacturer.

Technical Specifications

Receptor Type ................................................ Amorphous Silicon
Conversion Screen .............................. Integral columnar CsI:Tl
Pixel Area - Total ............. 298mm (h) x 298mm (v) (11.7 x 11.7 in)
Pixel Matrix - Total .......... 1,536 (h) x 1,536 (v)
Effective ................................. 1,516 (h) x 1,516 (v)
Pixel Pitch ........................................... 194 μm
Limiting Resolution .......... 2.58 lp/mm @ 15 fps (1 x 1)
........................................ 1.29 lp/mm @ 30 fps (2 x 2)
Image Quality (RQA5) (typical)
MTF (1x1)
1.0 lp/mm .................................................. 55%
2.0 lp/mm .................................................. 25%
2.58 lp/mm (Nyquist Frequency) ............... 16%
DQE (1x1, Quantum-limited)
0 lp/mm .................................................. 77%
1.0 lp/mm .................................................. 60%
2.0 lp/mm .................................................. 37%
Quantum Limited Dose (2x2) .............. 1.5 nGy/frame
Energy Range .................. 40 - 150 kVp
Fill Factor ................................. <5% (first frame)
Lag .............................................. 68%
Scan Method ................................. Parallel
Data Output .................... LVDS, CameraLink
A/D Conversion ......................... 16-bit
Cooling ........................................ Passive
Radiation Tolerance ................. 2000 Gy (active area)
Dynamic Range ...................... 94 dB std modes
........................................ 108 dB DGS modes

Power Requirements

Input voltage range .............................. 21V - 33V
(measured at the input of the imager)
Nominal Power Consumption1 .................. 20W
Peak Power Consumption1 (initialization) .............. 25W

Mechanical

Weight ........................................ approx. 5.6 kg panel
Housing Material ............................... Aluminum
Sensor Protection .............................. Carbon fiber and aluminum
Mounting Provisions ........................ Blind, threaded mounting holes on the back.

Image Acquisition Modes

Normal Fluoro .................... 768 (h) x 768 (v) (2x2 binned)
Full Resolution .............................. 1,536 (h) x 1,536 (v)

Environmental

Temperature Limit ..................................... 15 - 53°C
(as reported by imager internal sensor)
Relative Humidity ......................... 10 - 80% Non-Condensing
Atmospheric Pressure .......... 70 kPa - 106 kPa
Shock Tolerance ......................... 20G (any direction no power applied)

Regulatory

U.S. ........................................ ANSI/AAMI ES60601-1:2005
Canada ....................................... CAN/CSA C22.2 No. 60601-1:08
EU ........................................ IEC/EN 60601-1:2005

Note1 - Power drop across supply cables is not included

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Drawings for reference only
Dimensions in Inches [mm]

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

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.