Product Description
The PaxScan® 2121XV is a real-time digital X-ray imaging device commonly referred to as a flat panel detector (FPD). The main system components are the 21 x 21cm 205um-pixel amorphous silicon FPD and Command Processor CP2LC. Excellent low-dose performance is achieved by combining Varex Imaging’s proprietary read-out 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:TI
Pixel Area - Total .......................... 209.9 mm (h) x 209.9 mm (v)
Pixel Matrix - Total ..................... 1,024 (h) x 1,024 (v)
Effective ............................................ 1,004 (h) x 1,004 (v)
Pixel Pitch ........................................... 205 μm
Limiting Resolution .......................... 2.43 lp/mm (1 x 1)
........................................... 1.22 lp/mm (2 x 2)

Image Quality (RQA5) (typical)
MTF (1x1)
0.5 lp/mm ........................................ 55%
1.0 lp/mm ........................................ 22%

DQE (1x1, Quantum-limited)
0 lp/mm ........................................ 80%
1.0 lp/mm ........................................ 65%
2.0 lp/mm ........................................ 40%
Quantum Limited Dose .................. 2 nGy/frame (2 x 2)
........................................... 6 nGy/frame (1 x 1)

Energy Range ................................... 40 - 150 kVp
Fill Factor ......................................... 77.4%
Lag .................................................. 2.5% Nominal (first frame)
Scan Method ...................................... Progressive
Data Output ...................................... Fiber Optic
A/D Conversion .................................. 16-bit
Cooling ............................................ Passive
Radiation Tolerance (active area) ........ 2000 Gy
Dynamic Range ................................ 94 dB std modes

Power Requirements
Input voltage range .......................... 21 V - 33 V
(measured at the input of the imager)
Nominal Power Consumption¹ .............. 12 W
Peak Power Consumption¹ (initialization) ...... 12 W

Mechanical
Weight ........................................... 3.2 kg
Housing Material .............................. Aluminum
Sensor Protection .......................... Carbon fiber and aluminum
Mounting Provisions ........................ Blind, threaded mounting holes on the back

Image Acquisition Modes
2 x 2 Binned ............ 60 fps continuous X-ray, 30 fps pulsed Fluoro
Full Resolution .............. 30 fps continuous X-ray, 15 fps pulsed Fluoro

Environmental
Temperature Range - Operating ............. 15°C - 58°C
(as reported by imager internal sensor)
Temperature Range - Storage ............... -20°C - 70°C
Relative Humidity (non-condensing) ....... 10% - 90%
Atmospheric Pressure ................. 70 kPa - 106 kPa
Shock Tolerance ............... 20G (any direction no power applied)

Regulatory
Canada ............................ CAN/CSA C22.2 No. 60601-1:14
EU ........................................ IEC/EN 60601-1:2012

¹Power drop across supply cables is not included

Note ¹ PaxScan is a Registered Trademark of Varex Imaging Corporation
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.