



### **Product Description**

The PaxScan® 2020X is a real-time digital X-ray imaging device commonly referred to as a flat panel detector (FPD). The main system components are the 20 x 20cm 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 .....	199 mm (h) x 199 mm (v) (7.8 x 7.8 in.)
Pixel Matrix - Total .....	1,024 (h) x 1,024 (v)
Effective .....	1,004 (h) x 1,004 (v)
Pixel Pitch .....	194 µm
Limiting Resolution .....	2.58 lp/mm @ 30 fps (1 x 1)
	1.29 lp/mm @ 60 fps (2 x 2)

### **Image Quality (RQA5) (typical)**

<b>MTF (1x1)</b>	
1.0 lp/mm .....	55%
2.0 lp/mm .....	25%
2.58 lp/mm (Nyquist Frequency) .....	16%
<b>DQE (1x1, Quantum-limited)</b>	
0 lp/mm .....	77%
1.0 lp/mm .....	55%
2.0 lp/mm .....	30%
Quantum Limited Dose (2x2) .....	3.5 nGy/frame
Energy Range .....	40 - 150 kVp
Fill Factor .....	68%
Lag .....	< 5% (first frame)
Scan Method .....	Parallel
Data Output .....	Fiber optic
A/D Conversion .....	16-bit
Cooling .....	Passive
Radiation Tolerance .....	2000Gy (active area)
Dynamic Range .....	94 dB std modes
	108 dB DGS modes

### **Power Requirements**

Input voltage range .....	21 V - 33 V
	(measured at the input of the imager)
Nominal Power Consumption <sup>1</sup> .....	17 W
Peak Power Consumption <sup>1</sup> (initialization) .....	21 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**

Normal Fluoro .....	512 (h) x 512 (v) (2x2 binned)
Full Resolution .....	1,024 (h) x 1,024 (v)

### **Environmental**

Temperature Limit .....	15 - 59°C
	(as reported by imager internal sensor)
Relative Humidity (non-condensing) .....	10 - 90%
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

Note <sup>1</sup> Power drop across supply cables is not included

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Drawing for reference only

Inches [Centimeter]

