Product Description

The PaxScan® 3030XV 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 30 cm 194 μm-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: Ti
- **Pixel Area - Total**: 298 mm (h) x 298 mm (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)
- **Energy Range**: 40 - 150 kVp
- **Quantum Limited Dose (2x2)**: 7 nGy/frame
- **Image Quality (RQA5) (typical)**
  - **MTF (1x1)**
    - 1.0 lp/mm: 55%
    - 2.0 lp/mm: 25%
    - 2.58 lp/mm (Nyquist Frequency): 16%
  - **DOE (1x1, Quantum-limited)**
    - 0 lp/mm: 77%
    - 1.0 lp/mm: 55%
    - 2.0 lp/mm: 30%
- **Full Resolution**: 1.536 (h) x 1,536 (v)
  15 fps continuous X-ray, 7.5 fps pulsed X-ray

Power Requirements

- **Input voltage range**: 21 V - 33 V (measured at the input of the imager)
- **Nominal Power Consumption**: 23 W
- **Peak Power Consumption**: 28 W (initialization)

**Mechanical**

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

**Image Acquisition Modes**

- **Normal Fluoro**: 768 (h) x 768 (v) (2x2 binned)
  30 fps continuous X-ray, 15 fps pulsed X-ray
- **Full Resolution**: 1,536 (h) x 1,536 (v)
  15 fps continuous X-ray, 7.5 fps pulsed X-ray

**Environmental**

- **Temperature Limit**: 15 - 53°C (as reported by imager internal sensor)
- **Relative Humidity**: 10 - 90% 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

*Note - Power drop across supply cables is not included*
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.

Specifications subject to change without notice.