The PaxScan® 4343CB is specifically designed to meet the needs of Cone Beam X-ray imaging applications featuring multiple sensitivity ranges and extended dynamic range modes. The main system components are the 43 x 43cm 139μm-pixel amorphous silicon FPD and Command Processor 2LC. Excellent low-dose performance is achieved by combining Varex Imaging’s proprietary readout electronics with the high sensitivity of 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 Specification

- **Receptor Type**: Amorphous Silicon
- **Conversion Screen**: Integral columnar CsI:T1
- **Pixel Area - Total**: 42.7 cm (h) x 42.7 cm (v) (16.8 x 16.8 in)
- **Pixel Matrix - Total**: 3072 (h) x 3072 (v)
- **Pixel Pitch**: 139 μm
- **Limiting Resolution**: 3.6 lp/mm (1x1) 1.8 lp/mm (2x2)

### Image Quality (RQA5)

- **MTF (1x1) at 1 lp/mm typical**: 54%
- **DQE (1x1, quantum-limited) at 0 lp/mm typical**: 74%
- **Contrast Ratio**: Large Area (120 mm): < 0.8% Small Area (10 mm): < 7%
- **Lag (1st frame)**: 3%
- **Maximum Entrance Dose/Frame typical**: 50 uGy
- **Dynamic Range**: 94 dB std modes 108 dB DGS modes
- **Energy Range**: 40 - 150 kVp
- **Fill Factor**: 60.7%
- **Scan Method**: Parallel
- **Data Output**: LVDS, CameraLink
- **A/D Conversion**: 16-bits
- **Dual/Dynamic Gain Modes, Effective bits**: > 17-bits
- **Non-Uniformity**: 1% maximum
- **Inactive Lines**: ≤ 9 total rows and columns, minimum separation 16 lines
- **Inactive Pixels**: No inactive visible pixels after interpolation
- **Cooling**: Air Cooling
- **Radiation Tolerance**: 2000 Gy (active area)

### Power Requirements

- **Input voltage range**: 21V - 33V (measured at the input of the imager)
- **Nominal Power Consumption**: 54W
- **Peak Power Consumption**: 68W

### Mechanical

- **Weight**: 13 kg
- **Housing Material**: Aluminum
- **Mounting Provisions**: Blind, threaded mounting holes front and back.

### Image Acquisition Modes (Current)

- **Fluoro FOV**: 1024 (h) x 1024 (v)
  - 25 fps
  - 2 x 2 binning, FOV 427 x 427 mm
- **Fluoro Zoom**: 1024 (h) x 1024 (v)
  - 30 fps
  - 1 x 1 binning, FOV 427 x 427 mm
- **RAD**: 3072 (h) x 3072 (v)
  - 4 fps
  - 1 x 1 binning, FOV 427 x 427 mm
- **CBCT**: 768 (h) x 768 (v)
  - 40 fps
  - 4 x 4 binning, FOV 427 x 427 mm

### Environmental

- **Temperature Limit**: 19 - 49°C (as reported by imager internal temperature 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 ES60601-1:2012
- **Canada**: CAN/CSA C22.2 No. 60601-1:14
- **EU**: IEC/EN 60601-1:2012

*Note*: Voltage and power drop across supply cables not included.

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PaxScan® 4343CB Receptor with CP2. Fiber optic cable not shown.

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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.

Dimensions are for reference only
Dimensions are in inches [mm]

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