

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

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 Varian'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.

**Product Description**

Receptor Type .....	Amorphous Silicon
Conversion Screen .....	Integral columnar CsI:Tl
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 (ROA5)**

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 µGy
Dynamic Range .....	94 dB std modes 108 dB DGS modes
Energy Range .....	40 - 150 kVp, 40-225 kVp
Fill Factor .....	60.7%
Scan Method .....	Progressive
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)

**Mechanical**

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

**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)

**Image Acquisition Modes (Current)**

Fluoro FOV:	1024 (h) x 1024 (v) 25 fps 3 x 3 binning, FOV 427 x 427 mm
Fluoro Zoom:	1024 (h) x 1024 (v) 30 fps 2 x 2 binning, FOV 285 x 285 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

Additional Modes: Consult Varian Medical Systems, Inc.

**Power Requirements**

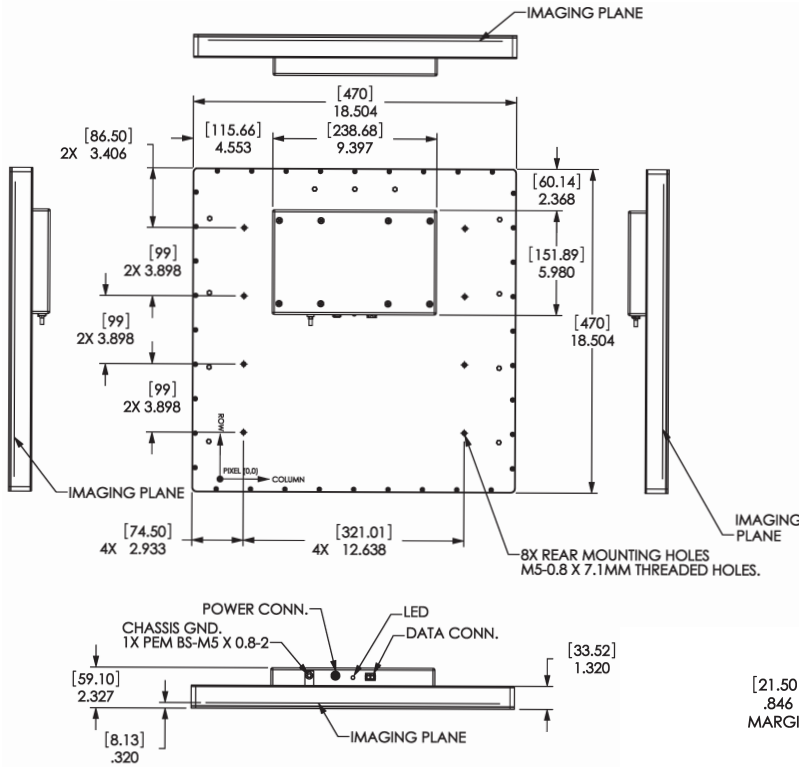
Input voltage range <sup>1</sup> .....	21V - 33V (measured at the input of the imager)
Nominal Power Consumption <sup>1</sup> .....	54W
Peak Power Consumption <sup>1</sup> (initialization) .....	68W

Note <sup>1</sup> Voltage and power drop across supply cables not included

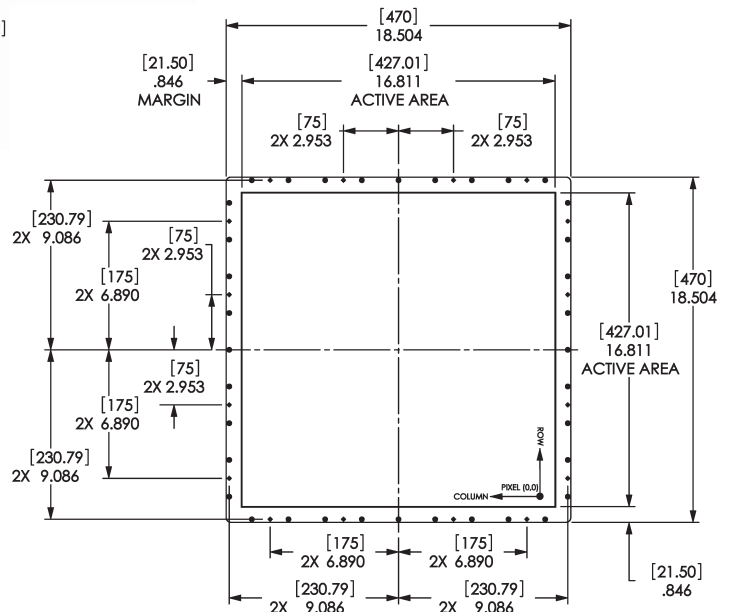
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Dimensions are in inches [mm]

**Rear View**



**Front View**



NOTE: Varian Amorphous Silicon Image 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.

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