

PaxScan® 4343DX Receptor

The PaxScan® 4343DX is specifically designed to meet the needs of Radiographic and Fluoroscopic X-ray imaging applications featuring multiple sensitivity ranges and extended dynamic range modes. The 4343DX has a cost effective Gigabit Ethernet communication link, hardware synchronization signals and single 24V power input. 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

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|---|---|
| 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) |
| MTF, X-Ray | 50% (1.0 lp/mm at 80 kVp, 1x1) |
| DQE (0), Quantum-Limited | 70 ±5% |
| Energy Range | 40 - 150 kVp |
| Fill Factor | 61% |
| Dynamic Range | 80 dB std modes 98 dB DGS modes |
| Contrast Ratio | Large Area (120 mm): < 0.8% Small Area (10 mm): < 7% |
| Lag | <5% (first frame) |
| Scan Method | Progressive |
| Data Output | Gigabit Ethernet |
| A/D Conversion | 16-bits |
| Dual/Dynamic Gain Modes, Effective bits | >16-bits |
| Non-Uniformity | 1% maximum |
| Inactive Lines | ≤ 16 total rows and columns, minimum separation 16 lines |
| Inactive Pixels | No inactive visible pixels after interpolation |
| Maximum Entrance Dose/Frame, Gain-1 | 4 0 u G y |
| Cooling | Passive convection |
| Radiation Tolerance | 2000 Gy (active area) |

Mechanical

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

Environmental

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|----------------------------|--------------------------------------|
| Temperature Limit | 10-35°C case temperature |
| Relative Humidity | 10-90% Non-Condensing |
| Atmospheric Pressure | 70 kpa - 106 kpa |
| Shock Tolerance | 20G (any direction no power applied) |

Image Acquisition Modes (Current)

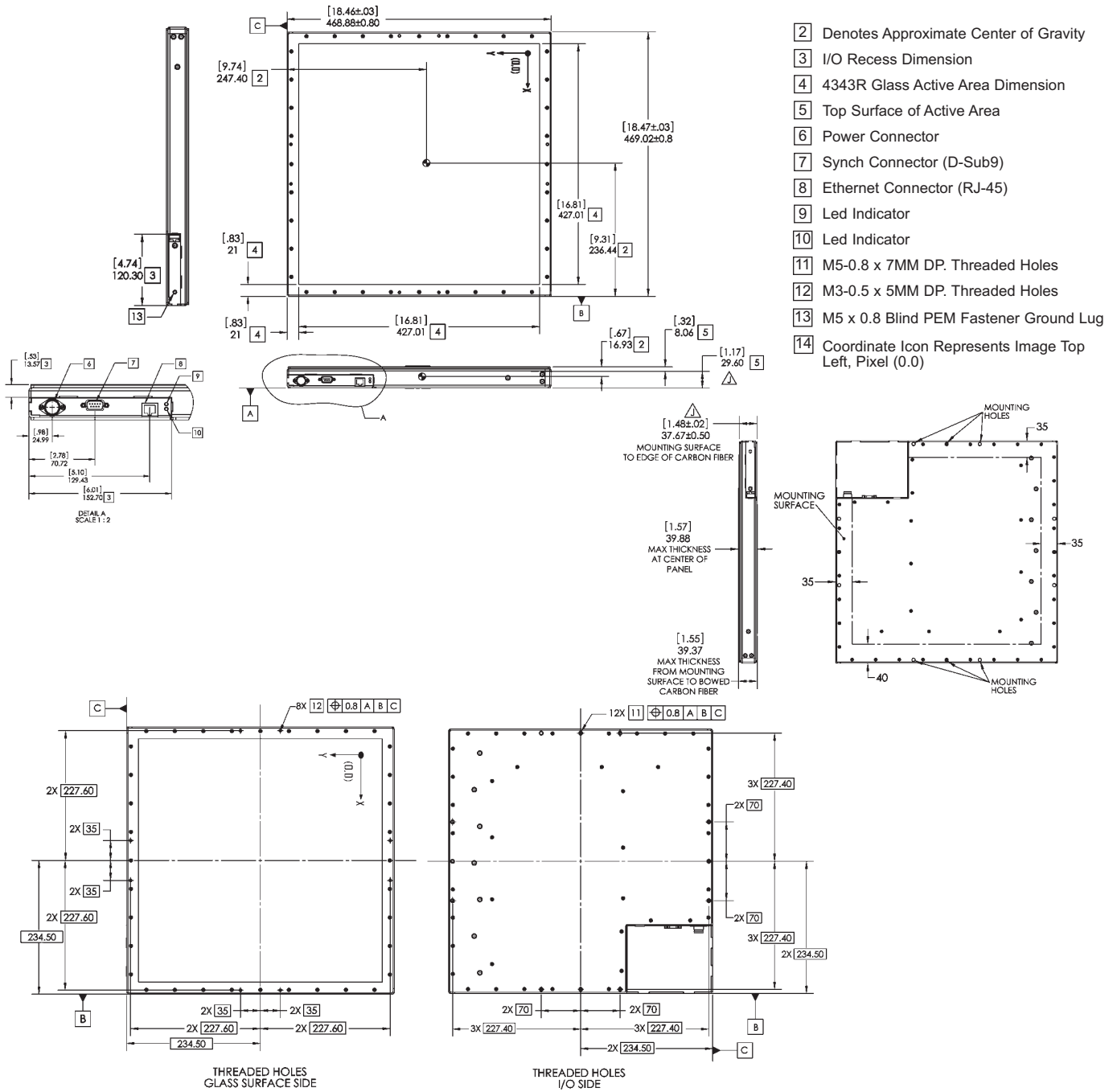
| | |
|--------------|---|
| Fluoro FOV: | 1024 (h) x 1024 (v) 25fps (cont), 12.5 fps (pulsed) 3 x 3 binning, FOV 427 x 427 mm |
| Fluoro Zoom: | 1024 (h) x 1024 (v) 30fps (cont.), 15 fps (pulsed) 2 x 2 binning, FOV 285 x 285 mm |
| RAD: | 3072 (h) x 3072 (v) 4fps (cont), 2 fps (pulsed) 1 x 1 binning, FOV 427 x 427 mm |
| CBCT: | 768 (h) x 768 (v) 40 fps (cont.), 20fps (pulsed) 4 x 4 binning, FOV 427 x 427 mm |

Additional Modes: Consult Varian Medical Systems, Inc.
Note: Pulsed mode frame times assume the x-ray window is half of the frame time. Shorter x-ray windows will result in faster frame rates.

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Drawings are for reference only

Dimensions are in mm [inches]



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**X-RAY
PRODUCTS**

Salt Lake City, UT

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