



Product Description

The 4030DX is a real-time digital X-ray imaging device commonly referred to as a flat panel detector (FPD). The main system components are the 40 x 30cm 194µm-pixel amorphous silicon FPD and universal power supply. 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	397mm (h) x 298mm (v) (15.6 x 11.7 in)
Pixel Matrix - Total	2,048 (h) x 1,536 (v)
Effective	2,028 (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)
Image Quality (RQA5) (typical)	
MTF (1x1)	
1.0 lp/mm	50%
2.0 lp/mm	23%
DQE (1x1, Quantum-limited)	
0 lp/mm	77%
1.0 lp/mm	54%
2.0 lp/mm	30%
Quantum-limited Dose (2x2)	4nGy
Energy Range	40 - 150 kVp
Fill Factor	68%
Lag	<5% (first frame)
Scan Method	Parallel
Data Output	Gigabit Ethernet
A/D Conversion	16-bit
Cooling	Passive
Radiation Tolerance	2000 Gy (active area)
Dynamic Range	94 dB std modes 108 dB DGS mode

Power Requirements

Input voltage range	21-33 Volts (measured at the input of the imager)
Nominal Power Consumption ¹	27 Watts
Peak Power Consumption ¹ (initialization)	32 Watts

Mechanical

Weight	approx. 7.3 kg
Housing Material	Aluminum
Sensor Protection	Carbon fiber and aluminum
Mounting Provisions	Blind, threaded mounting holes on the back.

Image Acquisition Modes

Normal Fluoro	1024 (h) x 768 (v) (2x2 binned)
Full Resolution	2,048 (h) x 1,536 (v)

Environmental

Temperature Limit	15 - 49°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 ES 60601-1:2012
Canada	CSA 22.2 No. 60601-1:14
EU	IEC/EN 60601-1:2012

Note ¹ Power drop across supply cables not included

Drawings are for reference only

Dimensions are in inches [mm]

