OVERVIEW

The Varex PaxScan 4343R is our largest X-ray imaging flat panel detector designed for general digital radiographic imaging. Based upon the new Gigabit Ethernet interface, images are displayed on a user-supplied workstation.

The 4343R embeds the M-series Varex Smart Panel (VSP) software within the receptor. Developers interface with the receptor through VSP COMM which resides on the workstation. The integrator experience is simplified through the new M-series software interface. An onboard Control Panel is used to manage receptor settings and configuration. The ViVA™ sample imaging application is included. VSP COMM is Windows 10 (32 & 64-bit) compatible.

FEATURES AND BENEFITS

- Designed for fixed applications
- Excellent image quality
- High reliability
- Extremely short cycle time 3.4 sec
- Automated Exposure Detection (AED)

APPLICATIONS

- Digital radiography

Reliability and Performance

Varex 4343R is a robust X-ray detector designed for fixed and digital radiography applications.
TECHNICAL SPECIFICATIONS

SENSOR
Receptor Type ................................................. Amorphous Silicon with PIN Technology
Scintillator .............................................................. DRZ+ / CsI
Pixel Area - Total ...................................... 427 (h) x 427 (v) mm (16.8 x 16.8 inch)
Active (DRZ+) ........................................ 424 (h) x 424 (v) mm (16.7 x 16.7 inch)
Active (CsI) .................................... 421 (h) x 421 (v) mm (16.6 x 16.6 inch)
Pixel Matrix - Total .............................................. 3,072 (h) x 3,072 (v)
Effective (DRZ+) ...................................... 3,052 (h) x 3,052 (v)
Effective (CsI) ........................................ 3,032 (h) x 3,032 (v)
Pixel Pitch .................................................. 139 μm
Limiting Resolution ........................................... 3.6 lp/mm

IMAGE QUALITY
DQE @ 2.1 μGy ........................................... GADOX/DRZ+ (typical) CsI (typical)
DQE @ 0 lp/mm .............................................. 38% 78%
DQE @ 1 lp/mm .............................................. 27% 55%
DQE @ 2 lp/mm .............................................. 16% 42%
DQE @ 2 lp/mm .............................................. 7% 28%
DQE @ Nyquist ............................................... 3% 14%
MTF @ 1 lp/mm .............................................. 54% 56%
MTF @ 2 lp/mm .............................................. 23% 27%
MTF @ 3 lp/mm .............................................. 9% 14%
MTF @ Nyquist ............................................... 6% 10%

COMMUNICATIONS
Cycle Time @ 550 ms ........................................ 3.4 sec
X-Ray Window .................................................. 350-4000 ms
Data Output ...................................................... Gigabit Ethernet
A/D Conversion .................................................. 16-bit
Workstation Interface ........................................ Ethernet Port
Exposure Control .............................................. Inputs: Expose-Request and Prep
 Outputs: Expose-OK AED: vTrigger

MECHANICAL
Weight (DRZ+ / CsI) ........................................ 6.1 kg ±0.1 kg / 6.2 kg ±0.1 kg
Housing Material .................................................. Aluminum
Sensor Protection Material .................................. Carbon Fiber and aluminum

ENVIRONMENTAL
Shock ................................................................. High-shock tolerance
Temperature Operating (at back cover) ............. 10°C to 40°C (max.)
Storage Temperature (ambient) ...................... -20°C to +70°C
Humidity - Operating & Storage (non-condensing) 10% to 90%

POWER
Power Dissipation .............................................. 14 watts (max.)
Power Supply/Adaptor ................................... 90-240 VAC, 47-63 Hz

REGULATORY
U.S. ............................................................... ANSI/AAMI ES 60601-1:2012
Canada ......................................................... CAN/CSA C22.2 No. 60601-1:14
EU ................................................................. IEC/EN 60601-1:2012

1 Unless otherwise specified, Varex Imaging Flat Panel X-ray Detectors are components intended to be integrated into products by X-ray system manufacturers. System manufacturers are responsible for qualifying and validating their products for their intended uses and meeting all applicable regulatory requirements.

4343R Panel