**OVERVIEW**

Varex Imaging XRD 4343CT is based on the next generation platform of Varex Imaging’s amorphous silicon (a-Si) Flat Panel X-ray Detectors (FPDs). The enhanced performance XRD 4343CT supports a full 43 x 43 cm² (17 x 17 in²) field of view providing superior imaging for low-dose non-destructive testing and cone beam CT applications. The Varex Imaging XRD 4343CT offers 150 μm native pixel resolution and frame rates up to 85 fps. XRD 4343CT supports energy levels up to 225 kV and is available with several scintillator options. Rapid system integration is accomplished with real-time image processing PCIe board for host computer, integrated trigger and X-ray synchronization circuitry and a comprehensive software library for image acquisition and processing.

**FEATURES AND BENEFITS**

- 15 fps @ 150 μm, 30 fps @ 300 μm (full FOV)
- 85 fps @ 300 μm (432 mm x 72 mm FOV)
- 150 μm pixel pitch, 2880 x 2880 pixel matrix
- Various binning and FOV options
- 65,536 grey levels (16-bit ADC)
- Ultra high sensitivity
- Selectable gain settings
- Up to 225 kV in microfocus applications
- Fiber optical interface with real-time corrections

**APPLICATIONS**

- Non-destructive testing (NDT)
- 3D Cone Beam CT
- Metrology
- Scientific applications
### Technical Specifications

#### SENSOR
- Panel: Single substrate amorphous silicon active TFT-diode array
- Scintillator: Direct deposition CsI: Tl or various Gd$_2$O$_2$S:Tb (Gadox)
- Pixel Matrix: 2880 × 2880 @ 150 μm pitch
- Total Area: 432 mm × 432 mm

#### ELECTRONICS
- Amplifiers: Low noise ASICs with 6 user selectable gain settings
- ADC: 16-bit

#### MECHANICAL
- Size: 470 mm (w) × 470 mm (l) × 57 mm (h)
- Weight: 16 kg
- Housing: Aluminum with carbon-fiber entrance window

#### COMMUNICATIONS
- Data I/F: Fiber optical to PCIe image processing board on host computer
- X-ray I/F: Integrated X-ray trigger control
- Software: Support for 32 and 64 bit Windows® OS

#### IMAGE PROCESSING
- Type: Real time pixel corrections (offset, gain, defective pixels) on PCIe board

#### IMAGING PERFORMANCE
- Typical DQE (CsI): 76% (0 cy/mm), 60% (1 cy/mm), 44% (2 cy/mm), 52% (3 cy/mm) for RQA5
- Typical MTF (CsI): 66% (1 cy/mm), 34% (2 cy/mm), 18% (3 cy/mm)
- Energy Range: 20 - 225 kV (microfocus)
- Detector requires additional external shielding

#### ENVIRONMENTAL
- Temperature: 10 to 35°C (operating), -10 to 50°C (storage)
- Humidity: 30% to 70% RH (operating, non-condensing)
- Vibration: IEC/EN 60721-3 class 2M3 (10-150 Hz, 0.5 g)
- Shock: IEC/EN 60721-3 class 2M3 (11 ms, 2 g)

#### POWER
- Supply: 100 – 240 VAC, 50/60 Hz, XRD-EPS Power Supply
- Dissipation: 25 W

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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. Contents in this document are subject to change without notice.