

Making the Invisible Visible

XRD 1611 xQ

Flat Panel Detector



OVERVIEW

Varex Imaging's XRD 1611 xQ is a high speed, large area amorphous silicon Flat Panel X-ray detector for high dose industrial applications.

The XRD 1611 xQ supports a full 41 x 41 cm² field of view, is available with several scintillator options and supports a broad range of energy levels from 20 kV to 16 MV. This detector has a 100 µm native pixel pitch and operates at 10 fps at full resolution and full field of view; it also supports different fields of view and binning modes.

Rapid system integration is accomplished with integrated trigger and X-ray synchronization, a frame grabber providing real-time image-processing and a comprehensive software library for image acquisition and processing.

FEATURES AND BENEFITS

- High resolution with high speed
- 10 fps @ 100 µm
- Selectable Modes up to 68 fps
- Designed for 24/7 Applications
- Ultra high sensitivity
- Up to 16 MV
- Real time corrections

APPLICATIONS¹

- Non Destructive Testing (NDT)
- Cone Beam Computed Tomography (CBCT)
- Metrology
- Scientific applications

Technical Specifications

SENSOR

Panel	Amorphous silicon
Scintillator	CsI: TI or various Gadox
Pixel Size	100 μm pitch
Pixel Matrix	4096 \times 4096
Total Area	409.6 mm \times 409.6 mm

READ OUT MODES

Binning - 1 \times 1

Pixel Matrix	4096 \times 4096
Pixel Pitch	100 \times 100 μm^2
Max. Frame Rate	10 fps

Binning - 2 \times 2

Pixel Matrix	2048 \times 2048
Pixel Pitch	200 \times 200 μm^2
Max. Frame Rate	20 fps

(Additional read-out modes are available.)

ELECTRONICS

ADC	16-bit
Charge Amplifier	Low noise ASICs with user selectable gains

COMMUNICATIONS

Data I/F	Fiber optic to PCIe frame grabber
Software	64 bit Windows® / Linux OS

IMAGE PROCESSING

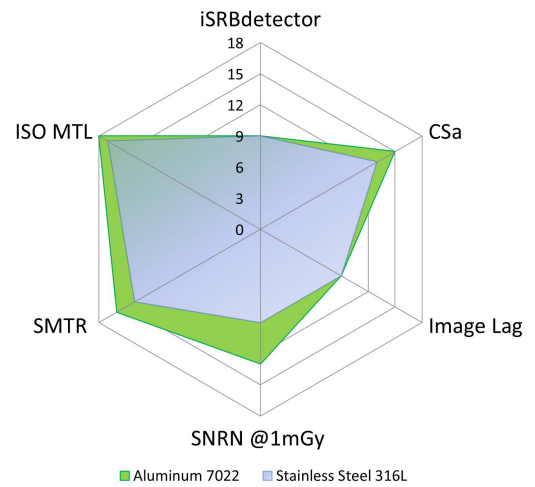
Type . . . Real time offset, gain, defective pixel corrections on frame grabber

MECHANICAL

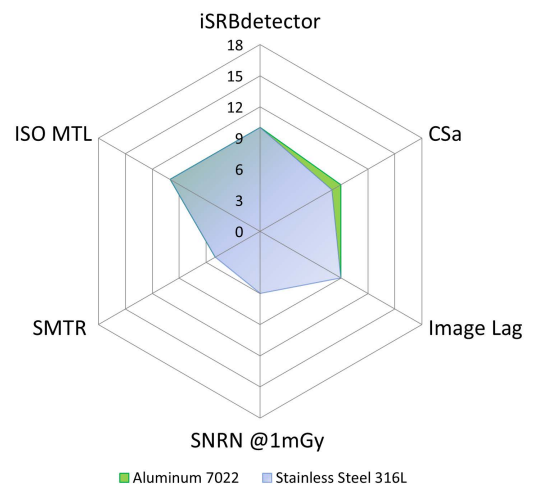
Size
672 x 599 x 44 mm

Weight (approx.)
25 kg

XRD 1611 HECsI @10Hz



XRD 1611 HRCsI @10Hz



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.



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