

New

XRC-1100

Radiation resistant X-ray Detector



Features

- Radiation resistant detector as a replacement for area detectors and image intensifiers
- Detector area: 175 x 150 mm
- Energy area: 30 kV up to > 250 kV
- Resolution: > 2 lp/mm
- Camera resolution: 1024 (H) x 896 (V) pixels
- Image rate: up to 9.5 (15) images/sec. at 12bit
- No occurrence of image interference due to magnetic fields or voltage variations

Customary area detectors only offer considerable limited working life within industrial permanent application.

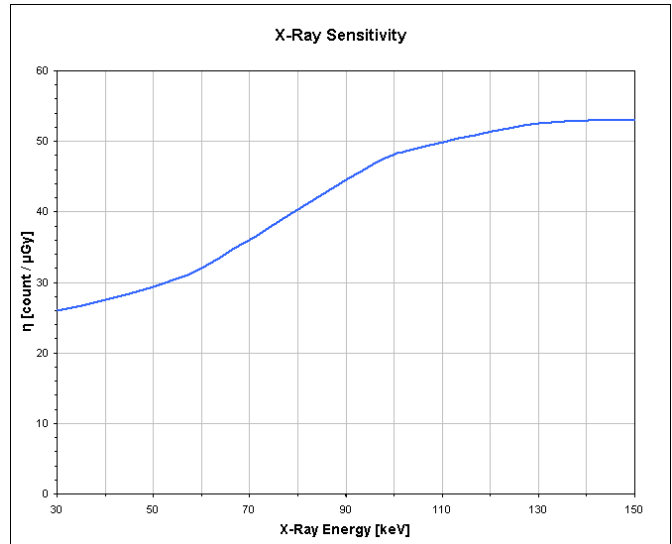
Especially, CT-applications make necessary various recordings, causing a very fast aging of area detectors.

In case of the Allied Vision Technologies GmbH **XRC-1100** detector the sensitive semiconductor sensor is protected against x-ray radiation by a lens and a mirror configuration. At higher energies it is possible to additionally install a lead shielding.

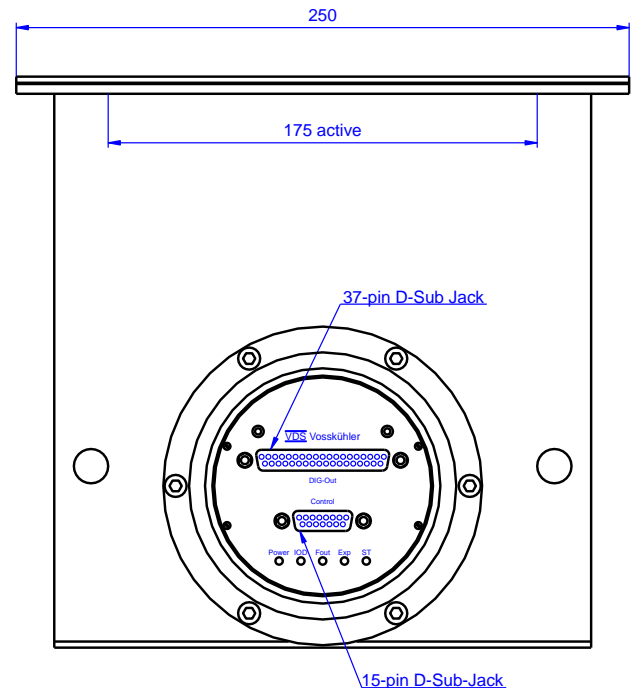
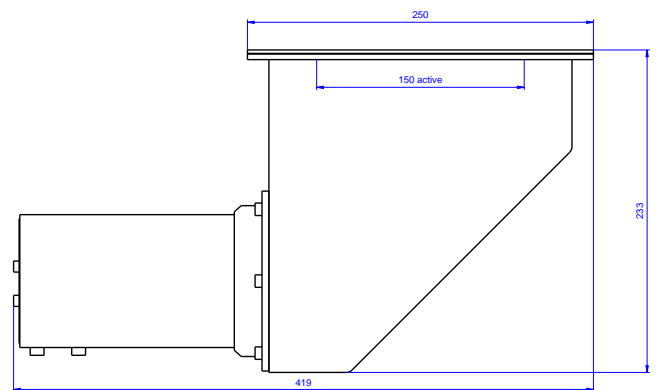
The image geometry of the **XRC-1100** cannot be influenced by magnetic fields or voltage variations. This is also a very important precondition for the employment in CT-systems.

The very high light sensitive CCD-camera of the **XRC-1100** supplies up to 9.5 images/sec. or rather 15 images/sec. within the 2x2 binning mode and is therefore also suitable for real time recordings.

The data is digitized with 12 bit and can be supplied via LVDS, Camera Link or Gigabit Ethernet.



Mechanical dimensions:



Technical Data

- Image area: 175 mm x 150 mm
- Resolution: > 2 lp/mm
1024 (H) x 896 (V) pixels or
512 (H) x 448 (V) with binning
- Pixel size: 170 x 170 μm
- Szintillator: Gd₂O₂S approx. 250 μm
- Energy area: 30 – 250 kV
- Image rate: 9.5 images/sec. or
15 images/sec. (binning)
- Usable for continuous or pulsed radiation (no
mechanical shutter required)
- Exposure times up to 1 sec.
- Anti-blooming circuit of the sensor
- Digital output 12 bit (LVDS, Camera Link, GigE)
- Camera dynamics: > 1:1000
- Pixel clock: 14 MHz / 7 MHz (Binning)
- Video amplification: 1 or 2 fold
- Weight: 6.35 kg
- Power supply + 12V (SELV),
(- 0 %, + 5 %) approx. 0.65 A
- Ambient air temperature: 0° - 40°C
- CE standard
- Made in Germany