XC-ACTAEON XCount



INDUSTRIAL PHOTON COUNTING DETECTOR





MEDICAL - INDUSTRIAL - DENTAL

XC-ACTAEON

INDUSTRIAL PHOTON COUNTING DETECTOR

Setting new standards in imaging speed, the 2000 fps XC-ACTAEON series brings the best in photon counting direct conversion imaging to the market. With powerful dual energy capability, unrivalled energy discrimination and unsurpassed charge sharing correction, XC-ACTAEON detectors provide solutions for the most stringent demands. The combination of imaging speed and sensitivity makes the XC-ACTAEON the ideal solution for advanced research applications and customers whose requirements go beyond the limits of other X-ray detector technologies.

IMAGING PARAMETERS AND PERFORMANCE

Pixel Technology

Photon Counting

Energy Discrimination

Dual Energy

Sensor material and thickness

Cadmium Telluride (CdTe): 0.75mm (standard energy) Cadmium Telluride (CdTe): 2.0mm (high energy)

Pixel size

100 μm

Pixel Fill Factor

100%

Tile Gap

 $100\,\mu m$

X-ray Energy range

10kVp to 300kVp

Active sensor area

25mm width

12.8mm, 25.6mm. 38.4mm and 51.2mm length

Count Rate Range

Up to 200 Mcps per mm³

Imaging speed

10,000lines/s + (full resolution)

Maximum Framerate

Up to 2000 fps

MTF

80 % @ 2lp/mm, 45 % @ 5lp/mm,

DOE (0)

>80% (RQA5 spectra, 6µGy, SID 1m)

Lag

0% (after X-ray 6μGy)

Ghosting

<0.1% 1min after X-rays (6µGy)

ELECTRICAL INTERFACE

Data interface

Gigabit Ethernet

Power supply

PoE+ / 12V DC

Trigger modes

SW, HW, HW gated (200ns – 1s)

External Trigger

Opto coupled 5V, 12-24V with external resistor

ENVIRONMENTAL CONDITIONS

Operating temperature range

+15 to 30°C @ 30% to 85% humidity

Storage temperature range

-10 to 50°C @ 10% to 95% humidity

Housing

IP20

X-ray window

Carbon Fibre

SOFTWARE

Software GUI included Fully flexible SDK included Supported operating systems

Windows 7 onwards

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【製造元】

Direct Conversion

ADS
Imaging&Science

Technologies

【お問い合せ先】

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