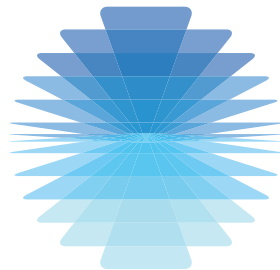
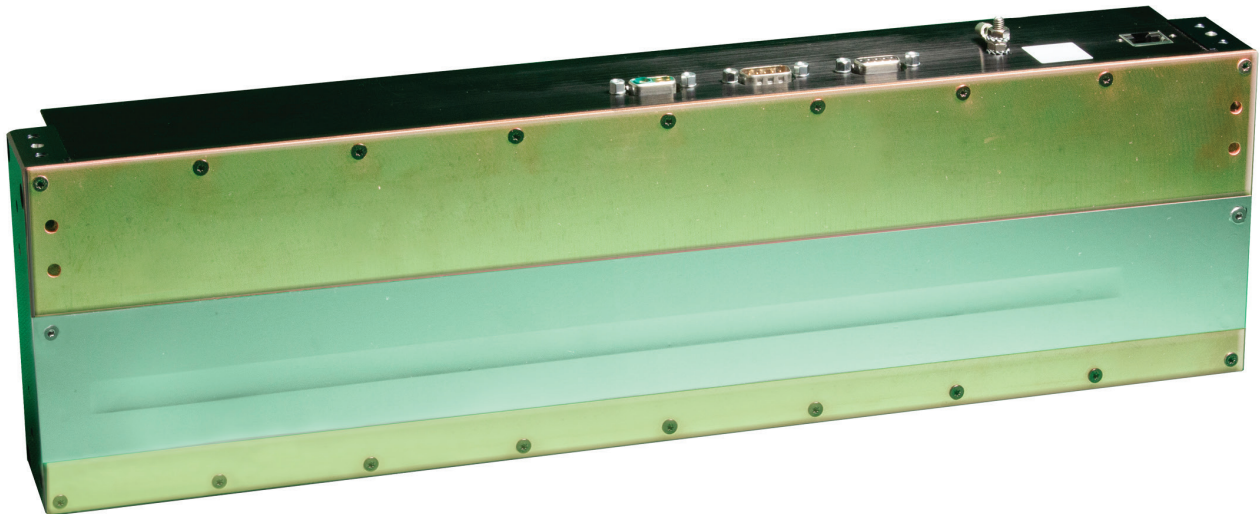


PRODUCT DATASHEET

XC-TDI

XCounter
A Direct Conversion Technology

DUAL ENERGY INDUSTRIAL PHOTON COUNTING DETECTOR



Direct Conversion

Empowered X-RAY Imaging

MEDICAL - INDUSTRIAL - DENTAL

XC-TDI

DUAL ENERGY INDUSTRIAL PHOTON COUNTING DETECTOR

The XC-TDI series detector is the fastest dual-energy photon counting industrial detector on the market. Ideal for line scan applications which demand high speed inspection and material discrimination, the Cadmium Telluride (CdTe) photon counting technology enables high resolution imaging at fast speed with the ability to differentiate between subject materials.

The unrivalled sensitivity combined with efficient TDI scanning maximises the use of available X-rays in generating high quality images thereby decreasing X-ray tube power requirements. The superior radiation hardness of CdTe compared to scintillator detectors sets new standards in detector lifetime.

IMAGING PARAMETERS AND PERFORMANCE

Pixel Technology

Photon Counting

Energy Discrimination

Single Energy / 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 μm

X-ray Energy range

10kVp to 160kVp (standard energy)

20kVp to 300kVp (high energy)

Active sensor area

6mm wide

200mm to 700mm length

Count rate range

Up to 200 Mcps per mm²

Imaging Speed

10,000+lines/s (full resolution)

MTF

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

DQE (0)

>80% RQA5 spectra, 6 μGy , SID 1m

Lag

0% (after X-ray 6 μGy)

Ghosting

<0.1% 1min after X-rays (6 μGy)

ELECTRICAL INTERFACE

Data interface

Gigabit Ethernet

Power supply

External 12VDC power supply

External Trigger

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

ENVIRONMENTAL CONDITIONS

Operating temperature range

+10 to +30°C @ 30% to 75% humidity

+10 to +35°C @ 30% to 55% humidity

+10 to +40°C @ 30% to 45% humidity

Temperature control

Internal Peltier temperature control + PWM controlled fan system

Storage temperature range

+5 to +50°C

Housing

IP20

X-ray window

Mylar or Aluminium

SOFTWARE

Software GUI included

Fully flexible SDK included

Supported operating systems

Windows 7 onwards

This datasheet contains typical information specific to products manufactured at the time of its publication. Direct Conversion AB. reserves the right to amend the specifications at any time. Contents herein do not constitute a warranty. © Direct Conversion AB.

※本カタログの製品の仕様等は、予告なく変更する事がございます。[2001]

【製造元】



【お問い合わせ先】



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