

Linear Imaging Detector and Software

kromekTM
detect image identify



eV3500TM

Linear Imaging Detector and Software

The eValuatorTM-3500 is a fully integrated Photon Counting energy discriminating CZT detector. This includes, an on-board FPGA allowing true “real time” operation.

Why CZT Detectors?

Density and Atomic Number Determination
High Efficiency + Low noise = Low Dose

The solid-state detector technology, Cadmium Zinc Telluride (CZT), provides superior efficiency and energy discrimination capabilities vs conventional Scintillation-based detectors.

CZT based detectors are rapidly becoming the technology of choice in many of today’s most advanced medical, industrial, and security applications.

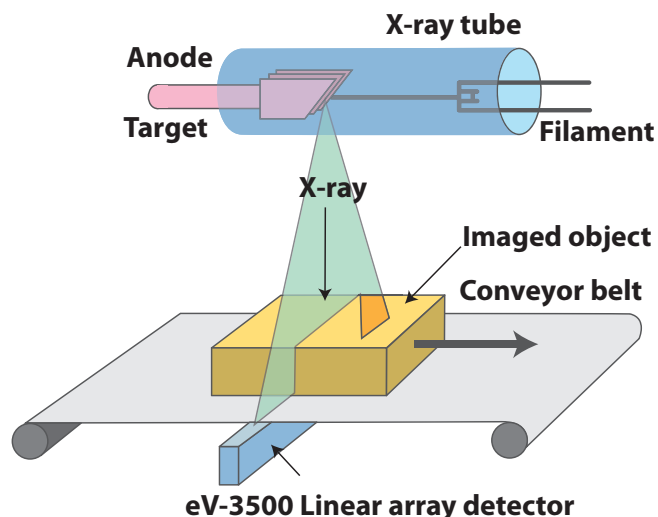
Increasingly x-ray Imaging requirements demand superior x-ray detection. As a result, all the major medical imaging companies are investing \$millions into CZT detector technology.

Applications

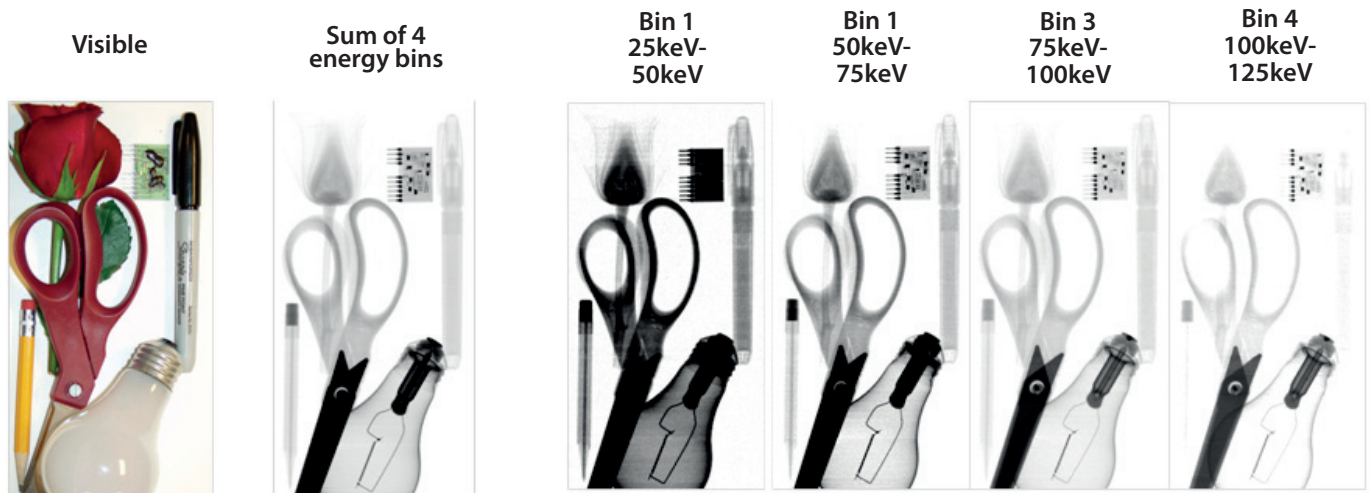
- Medical
 - Bone Mineral Densitometry
 - CT
 - Mammography
 - Research
- Security
 - Explosives Detection
- Industrial Food Inspection
 - Fat / Lean analysis
 - Contaminant Inspection
 - Process Control
- Laboratory and research imaging

Features

- Low noise
- High efficiency
- 5 Photon energy thresholds
 - Independently tunable
- Solid state detector technology
- Integrated electronics
- Non-hygroscopic sensor
- Real-time imaging



eV3500™



Specifications

- CZT Semiconductor
- Length: 128mm to 1024 mm
- Tile up to >1 meter length
- Pixel Pitch: 2 pixels / mm length
- Custom Pixel Geometries available
- Energy Range: 20keV – 160keV
- Integrated high voltage power supply
- Power Input: 3V, 5V, 12V
- Communication:
 - USB 2.0 or
 - Ethernet
- Power LED indicator
- HV LED indicator
- Software designed for Windows™ and Linux
- 160nS peaking time
- Integration Period: minimum 250 μ S

X-ray Operational Specifications

- 20-160 KVP
- 1 Million cps/pixel
- Operating Temperature 25°C to 40°C
- Recommend minimum 2mm Aluminum Filtration on X-ray output

