

SIGMA™



Kromek's SIGMA™
World-leading specification in
a compact form



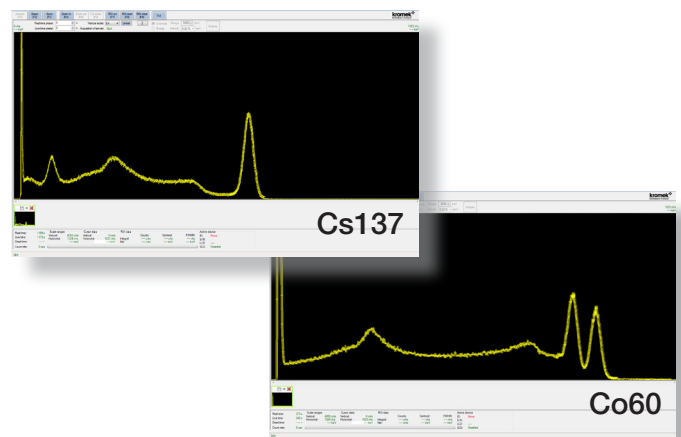
Typical Applications:

- Radiation Safety
- Health Physics
- Industrial and Medical
- Homeland Security
- Research Laboratories

Kromek's new generation of scintillator products

Kromek's next generation of scintillator products replace conventional photomultiplier technology with state of the art silicon photomultipliers (SiPMs). These gamma-ray detectors offer up to 32.8 cm³ of detection volume, delivered in a package providing significant benefits in cost, size, weight, power consumption and temperature stability.

Kromek's SIGMA™ product range interfaces directly with the existing MultiSpect Analysis™ platform providing all the analysis benefits currently enjoyed by users of Kromek's CZT detector product.



Current gamma ray scintillator options

Model	Case size (mm)	Crystal size (mm)	Volume cm ³	Resolution (%@Cs137)	Weight (g)
SIGMA50	35x35x130	25.4x25.4x51	32.8	<7.2	315
SIGMA25	35x35x105	25.4x25.4x25.4	16.4	<7.2	215

USB powered 250 mW

Specifications

Detector	SIGMA50 1" x 1" x 2" CsI(Tl) Detector SIGMA25 1" x 1" x 1" CsI(Tl) Detector
Energy Range	50 keV – 2 MeV
Maximum throughput	5,000 cps
Energy resolution	< 7.2 % FWHM @ 662 keV (21°C operation)
Number of Channels	4096 (12 bit)
Power consumption	250 mW
Dimensions	SIGMA50 34.5 mm x 34.5 mm x 130 mm SIGMA25 34.5 mm x 34.5 mm x 105 mm
Weight	SIGMA50 315g SIGMA25 215g
Operational temperature range	-10° to 40°C



**Nuclear
detection**



**Medical
imaging**



**Security
screening**

detect image identify



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