

40 years of Products for Your Imagination

**AMETEK**  
MATERIALS ANALYSIS DIVISION

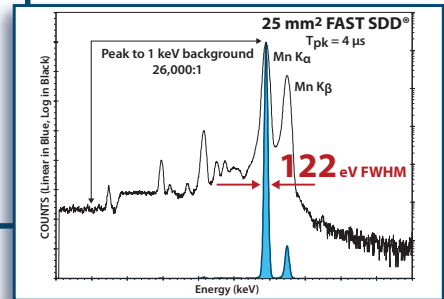
*New in-house manufacturing = The highest performing detectors available*

## The True State-of-the-Art

**NEW**

### Ultra High Performance FAST SDD<sup>®</sup>

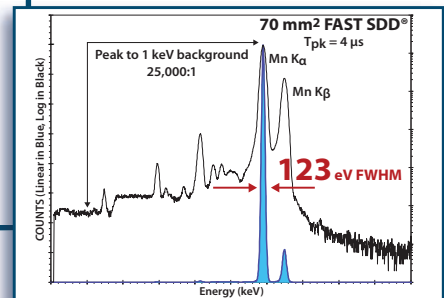
- Lower noise » Better resolution down to 122 eV
- Lower leakage current » Higher temperature operation (save battery life)
- Better charge collection » Better photo peak shape (no tailing)



**NEW**

### Large Area FAST SDD<sup>®</sup>

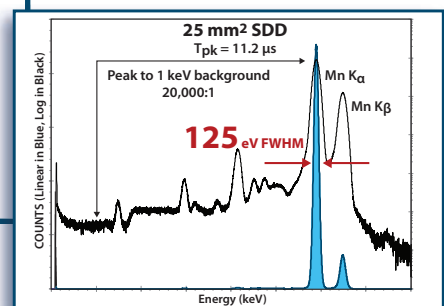
- 70 mm<sup>2</sup> active, collimated to 50 mm<sup>2</sup>
- 123 eV FWHM, 42 eV at C K<sub>α</sub> line
- Count rates > 2,000,000 CPS
- Same pinout, interface as 25 mm<sup>2</sup>



**NEW**

### Improved SDD

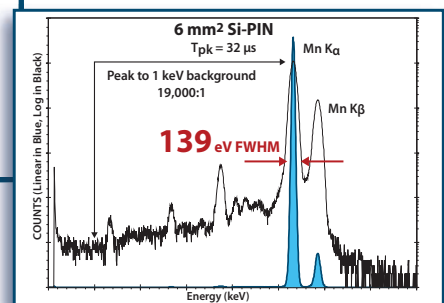
- 125 eV FWHM resolution @ 5.9 keV
- High Peak-to-Background Ratio – 20,000:1
- 25 mm<sup>2</sup> – collimated to 17 mm<sup>2</sup>
- 500 μm thick



**NEW**

### Improved Si-PIN

- 139 eV FWHM resolution @ 5.9 keV
- 6, 13 or 25 mm<sup>2</sup>
- High Peak-to-Background Ratio – 19,000:1



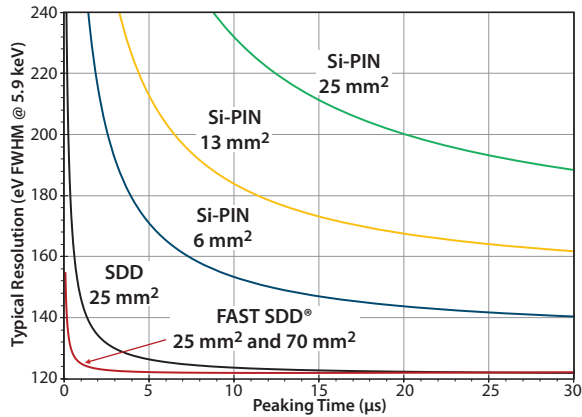
# State-of-the-Art X-Ray Solutions

## •Si-PIN

## •SDD

## •CdTe

The best detector for optimal results



### FAST SDD<sup>®</sup> Detector

>2,000,000 CPS and 122 eV FWHM Resolution

Options:

- 25 mm<sup>2</sup> collimated to 17 mm<sup>2</sup>
- 70 mm<sup>2</sup> collimated to 50 mm<sup>2</sup>
- Windows: Be (0.5 mil) 12.5 μm, or C Series (Si<sub>3</sub>N<sub>4</sub>)
- TO-8 package fits all Amptek configurations

Configurations to meet your needs



XR-100 and PX5 Digital Pulse Processor



X-123 Complete X-Ray Spectrometer

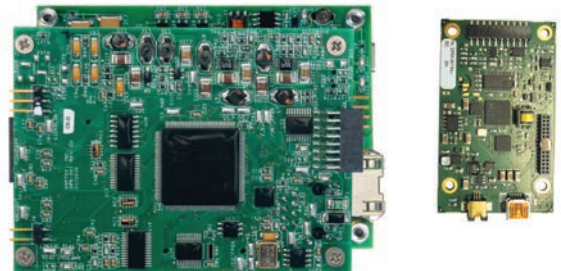


XRF Experimenters Kit

OEM Configurations



A sample of detectors with preamplifiers and heat sinks



Digital Pulse Processors and Power Supplies

OEM's #1 Choice  
For XRF

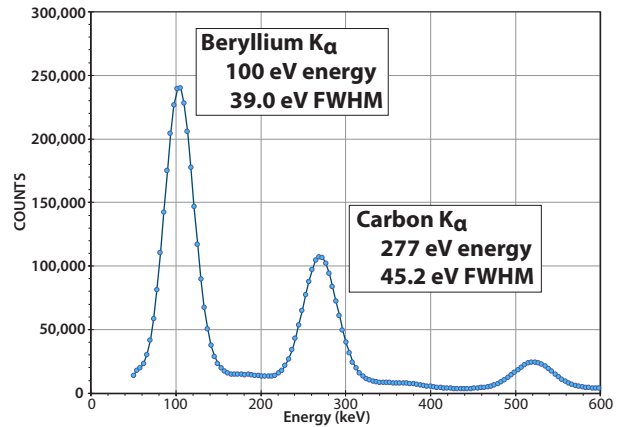
visit [www.amptek.com](http://www.amptek.com) for complete specifications

## EDS-SEM Solutions

Low cost, powerful detector for fast entrance to the market



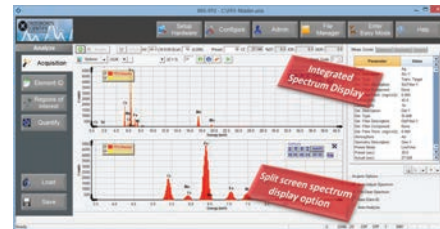
FAST SDD® with C2 Window ( $\text{Si}_3\text{N}_4$ )



## Software Solutions

New Release  
XRS-FP2 Quantitative Analysis Software

Push button ease to perform your analysis



More software solutions:

- Electron Probe X-Ray Analysis
- Sodigam for Scintillation Spectrometers
- Gamma-W for HPGe Detectors

## X-Ray Source Solutions

Complete your set-up — USB controlled



Options:

- 50 or 70 kV
- 4 or 10 W
- Ag, Rh or Au

OEMs — perfect for your bench-top or hand-held instrument



Need help? Give us a call or send us an e-mail — we will help you choose the best system for your project!

visit [www.amptek.com](http://www.amptek.com) for complete specifications

## Multichannel Analyzer (MCA) Solutions

Features:

- Compatible with traditional pulse shaping
- MCA & MCS modes
- High speed ADC (100 MHz) with digital pulse height measurement
- 10 ns conversion time
- USB, Ethernet, & RS232 interface



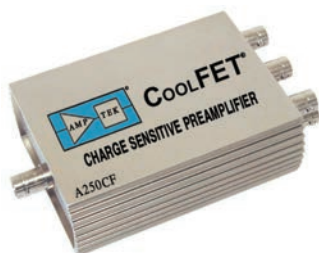
Full features in a pocket size

Need to calibrate a particle counter? Choose the PA version

## Preamplifier and Amplifier Solutions

Features:

- Low noise
- Low power
- Small size
- High reliability



For Space Instrumentation

Get the best performance from your instrument — extensive selection to choose from

## Gamma Ray Solutions

Powerful spectrometers for monitoring nuclear plants, toxic dump sites, and industrial operations

Handheld and USB powered



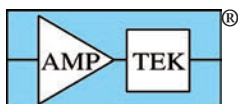
Portal monitor for easy mounting on passage ways



All the electronics for your scintillator and PMT



DPP, MCA and Power Supply for your HPGe Detectors & Preamps



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