

XCE150-SYS

This is a measurement system that integrates a CeBr3 scintillation detector with excellent characteristics, such as an energy resolution of approximately 4% at 662 keV and decay time of 18-20 ns, a charge-sensitive amplifier for scintillation detectors, and an all-in-one digital spectrometer. Additionally, a real-time updatable spectrum analysis software is now standard.

System Configuration

Scintillation Detector
XCE150
CeBr₃ φ1.5x1.5 inch



Charge-Sensitive Amplifier
APG1500




Measuring Instrument
APU101S



All-in-One

- High Voltage Power Supply
- Pre-amplifier Power Supply
- DSP-type MCA (Multi-Channel Analyzer) *Includes high voltage power supply, pre-amplifier power supply, and signal cables.*

Application Software

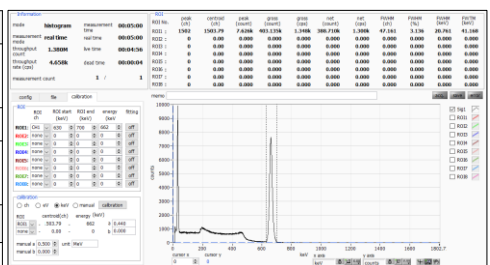


When using the radioactive source 137Cs

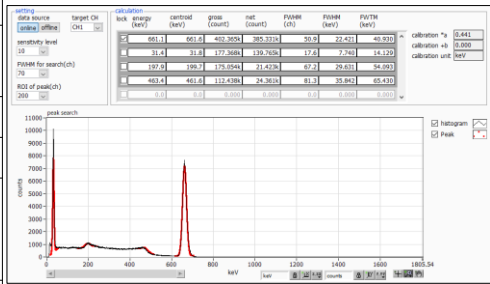
- High Voltage Power Supply Control
- Up to 8 types of ROI settings
- Spectrum Analysis

Specifications

Detector	Model XCE150
Crystal	CeBr ₃ Scintillator φ1.5 inches×1.5 inches (φ38mm×38mm)
Resolution	Approximately 4%@662keV
Dimensions Weight	φ45 × 195 mm (excluding protrusions) Approximately 540g
Charge-Sensitive Amplifier	Model APG1500
Noise Characteristics	> 100μVrms
Input Capacitance	220pF · 1000pF · 2200pF Selectable
Dimensions Weight	70(W)×20(H)×53(D) mm, Approximately 138g
Measuring instrument	Model APU101S
Analog input	1channel BNC connector The range ±1V, Input Impedance 1kΩ
Analog gain	Coarse Gain x1, x2, x5, x10 Fine Gain x0.5~x1.5
ADC	100Msps, 16bit
ADC gain	16k, 8k, 4k, 2k, 1k, 512, 256 ch.
Digital Processing	Trapezoidal Filter, rise time 0.1~20μs(0.01μsstep) flattop time 0.05~2μs(0.01μsstep) Timing Filter, Baseline Restorer, etc.
High Voltage Power Supply	0V~±4000V (maximum 1mA), Ripple Noise 5mVp-p, SHV Connector
Pre-amplifier Power Supply	±12V, ±24V, D-sub9 Pin Connector
Communication	Gigabit Ethernet, TCP/IP and UDP
Dimensions Weight	210(W)x45(H)x275(D) mm, Approximately 1800g
Application	Data measurement control, spectrum analysis software



Histogram Mode



Spectrum Analysis Software (Peak Search Analysis)

*Images is for illustration purpose.
*Please note that contents may change without prior notice.

