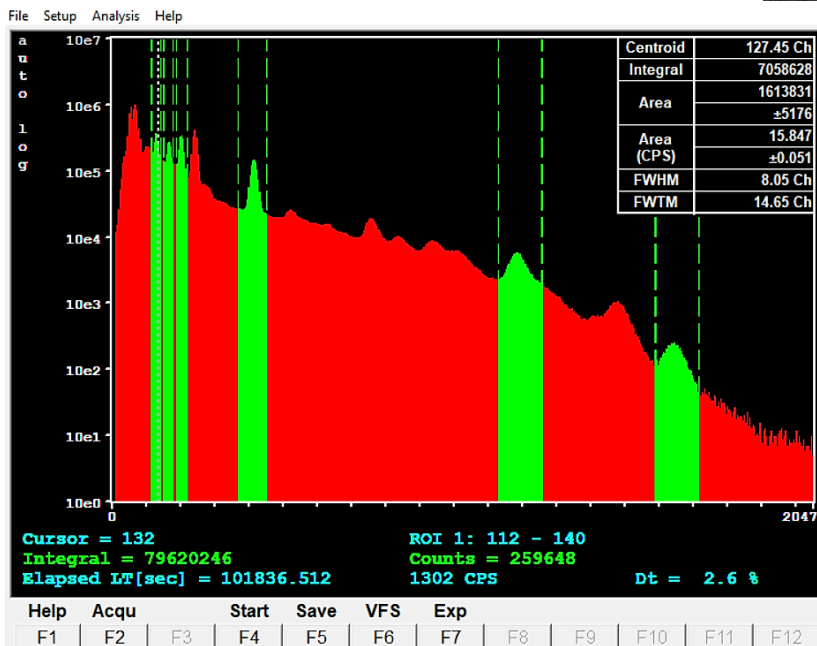




# ScintiClear™ Compact Spectrometer

CapeSym's ScintiClear™ compact spectrometer makes high-energy resolution gamma spectroscopy easy and compact. It consists of a high performance ScintiClear detector, digital MCA with high voltage and GUI. All you need is a computer. It can be used as a stand alone spectrometer, or as an OEM building block.



## Key features:

- Interchangeable high-performance ScintiClear™ detector heads of multiple sizes (see other side).
- USB powered and controlled.
- High quality electronics.
- Graphical user interface for data acquisition and analysis.
- Compact design and small weight.
- Competitive price.

Compact spectrometer graphical user interface

**Scintillator:** CapeSym's ScintiClear™ is a new high-performance SrI<sub>2</sub>(Eu)-based scintillator made in the USA. Our proprietary crystal growth process improves its inherently excellent properties, and limits the effects of Eu self-absorption. Guaranteed energy resolution of large crystals is  $\leq 3.5\%$ .

**Sensitivity:** Our ScintiClear™ compact detector core (scintillator + metal body PMT assembly) is designed for maximum sensitivity at given form factor, ranging from 160 to 780 cps/ $\mu$ Sv/h at 662 keV.

**Energy resolution:** Our ScintiClear™ crystals have achieved 2.9% ER at 662keV and 2.2% ER at 1332 keV. Guaranteed performance with a compact PMT is  $\leq 3.5\%$  ER at 662 keV.

# Unambiguous Identification with ScintiClear™

CapeSym's new ScintiClear Compact Spectrometer delivers radiological performance that exceeds ANSI N42.48. It offers high energy resolution, high sensitivity, extremely low internal activity, and compact design. Read-out is via a rugged metal body Super-Bialkali Photomultiplier Tube (PMT) operational from -25 to 55 degC. ScintiClear spectrometer provides accurate spectroscopic information from 0.5  $\mu$ R/h to 25mR/h dose rate ( $^{137}\text{Cs}$ ).

	SC-SPRD-S	SC-SPRD-L	SC-SPRD-XL	SC-RIID-C
Crystal size, mm <sup>3</sup>	Ø25.0 x 12.7 (6.2 cc)	Ø25.0 x 25.0 (12.5 cc)	Ø25.0 x 51.0 (25.0 cc)	Ø25.0 x 25.0 (37.5 cc)
Package dimensions, mm	Ø30.0x30.0 L=40.0	Ø30.0x30.0 L=50.0	Ø30.0x30.0 L=75.0	Ø30.0x30.0 L=100.0
ER % at 662keV	≤3.5			
cps/ $\mu$ Sv/h at 662keV	160	260	520	780
Temperature range, °C	-25° to +55°			
Thermal shock	ANSI N42.48-2008			
SIGMA FOM $A\epsilon_p/R$ at 1.17 MeV, cm <sup>2</sup> /%	0.042	0.086	0.17 (side)	0.25 (side)

U-ore environmental sample + Cs-137

