# Scintillation Probe SC-MacroPixel-MCA









### Scintillation Probe SC-MacroPixel-MCA

#### **Benefits**

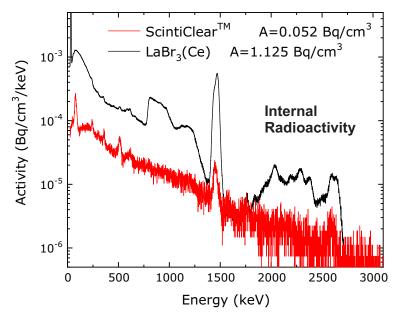
- Excellent energy resolution 6% at 122 keV, 3% at 662 keV and 2% at 1333 keV
- High sensitivity 5 cc of ScintiClear (Srl<sub>2</sub>(Eu)) scintillator
- Ultra compact design
- Fully solid state detector not sensitive to magnetic field
- IP67 dust proof and water resistant
- Operating temperature: -40 to 50°C
- Temperature stabilization and pulse pile-up rejection



### **Description**

Ultra-lightweight and compact **SC-MacroPixel-MCA** Scintillation Gamma Radiation Detection Probe with 14x14x25.4 mm (5cc) high-performance ScintiClear  $Srl_2(Eu)$  crystal coupled to SiPM array and read by tiny USB MCA. High energy resolution ScintiClear sensor with on the chip temperature stabilization and pulse pile-up rejection, as well as rugged watertight IP67 housing, makes SC-MacroPixel-MCA perfectly suited for field or lab applications. A user-friendly GUI for Windows and Android devices is included with the detector.

Specifications	
Detector type	Srl₂(Eu)
Detector size	14x14x25.4 mm
Energy range	10 – 4000 keV
Maximum count rate, cps	25000
Typical resolution	3.0% at 662 keV
Typical sensitivity to gamma radiation, cps/(µSv·h¹)	130 ( <sup>137</sup> Cs)
Protection class	IP67
Interface	Micro USB Type B
Operation temperature	-40°C to +50°C
Dimensions	17x17x70 mm
Weight	40 g



Because Strontium Iodide has a naturally stable isotopic composition, ScintiClear crystals enjoy the lowest intrinsic activity among high energy resolution scintillators available on the market. When compared to LaBr<sub>3</sub>(Ce) intrinsic activity of ScintiClear is up to forty times smaller.

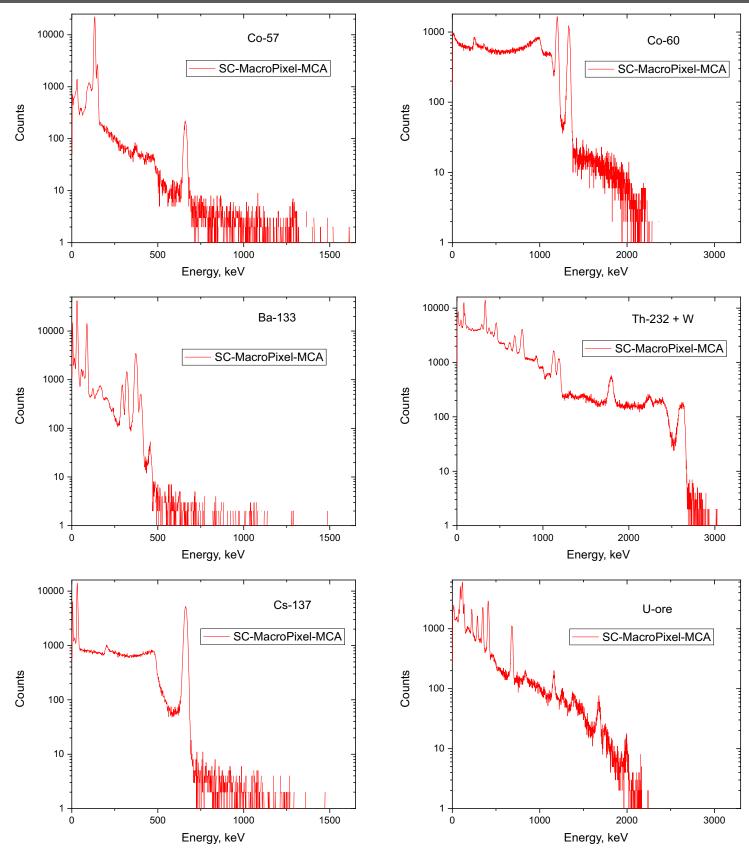
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## **Unambiguous Identification with ScintiClear**



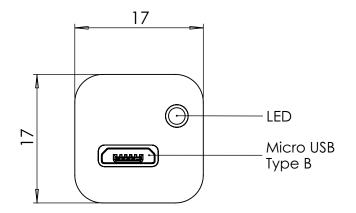
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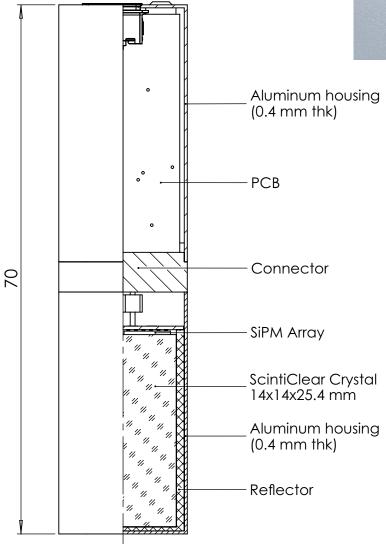


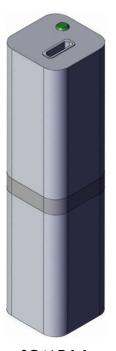


# 2D drawing









SCALE 1:1

#### Standard and Custom Radiation Detectors







#### **About CapeScint**

CapeScint is a subsidiary of CapeSym, Inc. a multi-faceted company with 100+ years of combined experience in scintillators, semiconductors, and radiation detection instruments. CapeScint has its warehouse facilities and customer support staff located in Greater Boston Area, Massachusetts, USA.

Founded in 1992 as Cape Simulations, CapeSym, Inc. is now a multi-faceted company offering novel technical crystals and detectors for nuclear detection, including ScintiClear™ Srl₂(Eu) and ElpasoLight™ CLYC(Ce) scintillators. In addition, CapeSym offers radiation detection instruments and equipment through www.zievert.com.





Our ongoing R&D leverages decades of experience in crystal growth, solid state physics, analytical chemistry, materials science, thermo-fluid transport, and engineering design. CapeScint as a subsidiary of CapeSym, Inc. has a long history working with the US Government as a contractor and as a supplier of essential goods and services. During the last 30 years CapeSym, Inc. and supported missions of multiple US Government agencies including NASA, MDA, USAF, DoE, DTRA, NIH, CWMD, and US Navy.





Design and specifications are subject to change without notice



Standard and Custom Radiation Detectors CapeScint 6 Huron Dr. Suite 1B Natick, MA 01760 | +1 (508) 653-7100 www.capescint.com | sales@capescint.com