

Long term reputation in the medical industry.

Assurance we will offer competitive pricing.

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LACO Inc.

can do it all!



**Indicated Use:** Alpha beta survey  
**Scintillator:** ZnS(Ag) adhered to 0.010" thick plastic scintillation material  
**Window:** 1.2 mg/cm<sup>2</sup>  
**Non-Uniformity:** Less than 10%  
**Cross Talk:** Alpha to beta - less than 10%; beta to alpha - less than 1%  
**Suggested Instruments:** Models 2224-1, 2360  
**Operating Voltage:** Typically 500 - 1200 volts  
**Connector:** Series "C" (others available)  
**Temperature Range:** -4° F to 122° F (-20° C to 50° C)  
**Construction:** Aluminum housing with beige powder coat paint

## Ludlum Model 43-93

### Alpha Beta Phoswich Scintillation Detector

**Window Area:** 100 cm<sup>2</sup> active; 89 cm<sup>2</sup> open  
**Photomultiplier Tube:** 1.125" (2.9cm) diameter  
**Efficiency (4pi):** 20% - <sup>239</sup>Pu; 15% - <sup>99</sup>Tc; 20% - <sup>90</sup>Sr/<sup>90</sup>Y  
**Background:** Alpha - less than 3 cpm; Beta - typically 300 cpm or less  
**Size:** 3.2"H x 3.5"W x 12.2"L (8.1 x 8.9 x 31cm)  
**Weight:** 1 lbs (0.5 kg)



Ludlum Measurements, Inc. manufactures many different types of detectors to measure alpha, beta, gamma, and neutron radiation

Scintillation Detectors utilize a material that emits light when exposed to radiation. This light is then converted to an electrical signal by a photomultiplier tube. Depending on the construction these detectors can be used to detect alpha, beta, gamma, or neutron radiation. This type of detector typically has good efficiency, low dead time, and energy discrimination capabilities. Photomultiplier tubes and scintillators are somewhat fragile. All Ludlum Measurements, Inc. scintillation detectors utilize a magnetically shielded photomultiplier tube.

#### Common Specifications for all Detectors:

**Connector:** Series "C" (others available)  
**Construction:** Aluminum housing with beige powder coat paint  
**Temperature Range:** -4° F to 122° F (-20° C to 50° C). May be certified for operation from -40° F to 150° F (-40° C to 65° C).

*Note: All efficiencies and sensitivities are typical and different detectors may vary.*

