



Ludlum Measurements, Inc.

Model 43-10-10

Alpha/Beta Sample Counter for iCam/Harwell Filters



Detail of Sample Counter Tray (open)

Introduction

The Model 43-10-10 is very similar to the Ludlum Model 43-10-1 (PN 47-1305), but this instrument has been modified to allow for counting of iCam and Harwell air monitor filter cards. The sample drawer (or tray) has a cutout that fits the filter card. Filter Card dimensions are 5.1 x 8.8 x 0.064 cm (2 x 3.5 x 0.025 in.) (H x W x D).

Specifications

Part Number: 47-4114

INDICATED USE: alpha sample counting

SUGGESTED INSTRUMENTS: Model 3030E, 2000, 2200, 2221, 2241 Series

DETECTOR TYPE: scintillator, ZnS (Ag)

DETECTOR OPERATING VOLTAGE: 500-1200 volts

CONNECTOR: series "C" (others available)

SAMPLE SIZE (maximum): 5.1 x 1.0 cm (2 x 0.4 in.) (Dia x L)

SAMPLE HOLDER: anodized aluminum tray with sample ring to allow for 2.5 cm (1 in.) or 5.1 cm (2 in.) diameter X 0.32 cm (0.125 in.) deep samples, with a cutout to fit iCam and Harwell filter cards

PHOTOMULTIPLIER TUBE: 5.1 cm (2 in.)

WINDOW: windowless

EFFICIENCY (4 π): 40% for ²³⁹Pu

BACKGROUND: 1 cpm or less

CONSTRUCTION: aluminum housing with beige powder coat

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

SIZE: 23.6 x 11.4 x 23.6 cm (9.3 x 4.5 x 9.3 in.) (H x W x L)

WEIGHT: 1.9 kg (4.1 lb)

Options & Accessories

Sample Planchets, 500 planchets per package

SIZE: 5.1 x 0.32 cm (2 x 0.125 in.) (Dia x Thickness)

500 Aluminum Planchets: Part Number 7525-371

500 Stainless Steel Planchets: Part Number 7525-371-01

Upgrade: A factory-performed modification is available for certain instruments in the Model 43-10 series that will allow them to accommodate the iCam/Harwell filters, if desired. Part Number 4142-306

