

Model 43-92

Alpha Scintillator



Ludlum Measurements, Inc.



Part Number: 47-2555
(face and top views)

Specifications

INDICATED USE: alpha contamination survey

SCINTILLATOR: ZnS(Ag)

EFFICIENCY (4 π): typically 20%–²³⁹Pu

WINDOW: 0.8 mg/cm² aluminized Mylar (1.2 mg/cm² recommended for outdoor use)

REMOVABLE PROTECTIVE SCREEN: 0.79 mm (0.03 in.) thick, 6.5 mm (0.25 in.) square openings, 88% open (see below for optional protective screens)

SCREEN OUTER DIMENSIONS: 167.6 x 91.4 mm (6.6 x 3.6 in.) (L x W)

WINDOW AREA:

Active: 100 cm² (15.5 in²)

Open: 88 cm² (13.6 in²)

RESPONSE NON-UNIFORMITY: less than 10% from average reading

BACKGROUND: 3 cpm or less

PHOTOMULTIPLIER TUBE: 2.9 cm (1.13 in.) diameter

OPERATING VOLTAGE: typically 500–1200 volts (1500 volts maximum)

CONSTRUCTION: aluminum with beige powder coating

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F)

CONNECTOR: series "C", unless specified otherwise

SIZE: 6.4 x 9.5 x 31.2 cm (2.5 x 3.8 x 12.3 in. (H x W x L))

WEIGHT: 0.5 kg (1.0 lb)

Optional Protective Screens

Model L-7393-209: 0.79 mm (0.031 in.) thick, 4 mm (0.16 in.) square openings, 81% open

Model L-7393-208: 0.79 mm (0.031 in.) thick, 4.8 mm (0.19 in.) hex openings, 83.5% open

Model L-7393-138: 0.51 mm (0.020 in.) thick, 6.5 mm (0.25 in.) square openings, 88% open