

# Model 44-110

## Large Area Tritium Detector



Ludlum Measurements, Inc.



Part Number: 47-2585

### Specifications

**INDICATED USE:** large area windowless gas flow proportional detector for detecting fixed tritium contamination. Windowless beta survey is designed to be placed on a flat surface and then purged with P-10 gas for 20 seconds before counting.

**SUGGESTED INSTRUMENTS:** Ludlum Model 12, Model 2000, Model 2200, Model 2221, Model 2350-1, Model 177-61

**DETECTOR TYPE:** windowless gas flow proportional

**EFFICIENCY:** 25% of  $^3\text{H}$

**RECOMMENDED COUNTING GAS:** P-10 (10% methane, 90% argon)

**GAS PURGE TIME:** approximately 20 seconds

**WINDOW:** windowless

**WINDOW AREA:**

Active: 126 cm<sup>2</sup> (19.5 in<sup>2</sup>)

Open: 100 cm<sup>2</sup> (15.5 in<sup>2</sup>)

**BACKGROUND:** 400 cpm

**OPERATING VOLTAGE:** typically 1700 volts

**COUNTER THRESHOLD SETTING:** typically 4.0 mV

**CONSTRUCTION:** anodized aluminum housing

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

**CONNECTOR:** series "C" (others available)

**SIZE:** 12.4 x 11.7 x 22.9 cm (4.9 x 4.6 x 9 in.) (H x W x L)

**WEIGHT:** 0.9 kg (2 lb)

### Model 44-110 Tritium Detector Accessories

Part Number	Quantity	Description
2310017	1	2-Stage Regulator
13-7836	1	Regulator Output Fitting (1/4 in. FPT to 1/4 in. tube)
22-9689	3	Plastic Fitting Nuts for 1/4 in. vinyl tubing
22-9522	2	Fittings for Flowmeter (1/8 in. MPT to 1/4 in. tubing)
22-9405	1	0.5 to 5 LPM Flowmeter for HIGH Flow Gas Probes such as Model 44-110
22-9514	AR	x feet of 1/4 in. OD vinyl tubing for gas supply and return

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Note: specifications subject to change without notification. We are not responsible for errors or omissions.

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