

Model L-177 H&F

Low Cost Hand & Foot Monitor

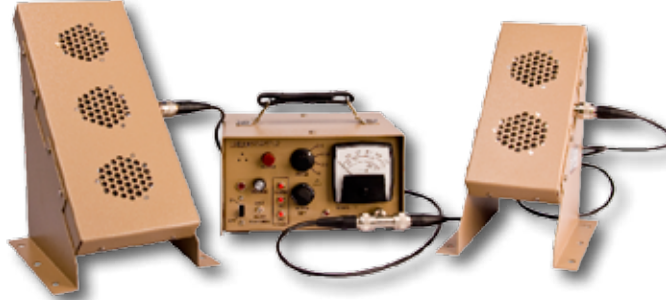
Radiation Detection for a Safer World



Ludlum Measurements, Inc.

Features

- Detects Alpha, Beta, and Gamma Radiation
- Low Cost
- Easy to Set Up
- User-Adjustable Alarms
- 4-Decade Range
- 50-Hour Rechargeable Battery



Specifications

Model 177 Benchtop Counter (PN 48-1632)

HIGH VOLTAGE: adjustable from 200 to 1500 volts
INPUT SENSITIVITY: adjustable from -10 to -100 mV
LINEARITY: within 5% of full scale
METER: 6.4 x 6.4 cm (2.5 x 2.5 in.) 1 mA, DC movement
METER DIAL: 0 to 500 cpm; 0 to 1.5 kV; BAT TEST
AUDIO: built-in unimorph speaker, with volume control, to provide click-per-event audio or audible alarm indicator
ALARM SET: front-panel locking control allowing alarm to be set at any point on the meter (can be read on meter)
ALARM: indicated by red lamp and audible tone (greater than 60 dB at 61 cm [2 ft])
CALIBRATION CONTROLS: accessible from the back of instrument (protective cover provided)
RESET: pushbutton to zero meter and/or reset alarm
MULTIPLIERS: x1, x10, x100, x1k
RESPONSE: toggle control selects FAST (2.2 seconds) or SLOW (22 seconds) response, for 90% of full scale reading
DATA OUT: 9-pin series "D" connector allowing for external connections of the following items: battery, unregulated supply, instrument common ground, alarm signal (current sink), pulse out, external background subtract, and recorder output
RECORDER OUTPUT: correlated to meter reading (adjustable to 0 to 1.25 volt at 1 mA)
POWER: 95 to 250 Vac and built-in 6-volt sealed lead-acid rechargeable battery
BATTERY LIFE: typically 50 hours in non-alarm condition (battery condition can be checked on meter)
BATTERY CHARGER: battery is continuously trickle-charged when instrument is connected to line power and turned on (optional external fast charger available)
SIZE: 12.7 x 20.3 x 15.2 cm (5 x 8 x 6 in.) (H x W x L)
WEIGHT: 1.9 kg (4.2 lb)

Model 44-25 Alpha Beta Gamma Hand Monitor Detector (Part Number 47-1508)

INDICATED USE: alpha, beta, gamma survey of hands
SUGGESTED INSTRUMENTS: general purpose survey meters, ratemeters, and scalers
DETECTOR: 2 pancake-type, halogen quenched GMs
SENSITIVITY: typically 6600 cpm/mR/hr
BACKGROUND: 120 cpm
WINDOW: 1.7 + 0.3 mg/cm² mica
WINDOW AREA: active: 31 cm² (4.8 in²)
open: 18 cm² (2.8 in²)
EFFICIENCY (4π): 5% for ¹⁴C; 22% for ⁹⁰Sr/⁹⁰Y; 19% for ⁹⁹Tc; 32% for ³²P; 15% for ²³⁹Pu
ENERGY RESPONSE: energy dependent
OPERATING VOLTAGE: 900 volts
CONSTRUCTION: aluminum housing
SIZE: 24.1 x 15.2 x 19.8 cm (9.5 x 6.0 x 7.8 in.) (H x W x L)
WEIGHT: 1.5 kg (3.3 lb)

Model 44-26 (Part Number 47-1509)

INDICATED USE: alpha, beta, gamma foot monitor
SUGGESTED INSTRUMENTS: typically used with alarm ratemeters
DETECTOR: 3 pancake-type, halogen quenched GMs
SENSITIVITY: typically 9900 cpm/mR/hr
BACKGROUND: 180 cpm
WINDOW: 1.7 + 0.3 mg/cm² mica
WINDOW AREA: active: 46 cm² (7.1 in²)
open: 27 cm² (4.2 in²)
EFFICIENCY (4π): 5%—¹⁴C; 22%—⁹⁰Sr/⁹⁰Y; 19%—⁹⁹Tc; 32%—³²P; 15%—²³⁹Pu
ENERGY RESPONSE: energy dependent
OPERATING VOLTAGE: 900 volts
CONSTRUCTION: aluminum housing
SIZE: 27.4 x 17.8 x 22.9 cm (10.8 x 7 x 9 in.) (H x W x L)
WEIGHT: 2 kg (4.4 lb)

Other Required Components: connection tee (Part Number 13-7788); 1.5 m (5 ft) cable (Part Number 40-1004-5)