

# Model 3-IS Series

## Intrinsically Safe Survey Meters

*Radiation Detection for a Safer World*



Ludlum Measurements, Inc.

### Introduction

The Model 3-IS series is an intrinsically safe radiation survey meter that can be used in areas where explosion safety is a primary concern. This meter is available in two models: a general purpose Model 3-IS, which can be adapted to a variety of external radiation detectors for exposure rate or contamination surveys and the Model 3-IS-1, which is outfitted with a single, internally mounted GM detector for performing exposure rate measurements.



Model 3-IS  
Part No. 48-3581



Model 3-IS-1  
Part No. 48-3651

	Model 3-IS	Model 3-IS-1
<b>Detector</b>	Only Ludlum Models 44-2, 44-6, 44-9, 42-41L and 44-38 are approved for use in this type of environment	Internally housed energy-compensated GM tube, 100 cpm/mR/hr sensitivity
<b>Detector Range</b>	Depends on detector selected, typically 0-200 mR/hr, or 0-500,000 counts/minute (cpm)	0.1 mR/hr to 1.0 R/hr
<b>Detector Connector</b>	Special locking series "C" (optional cable length from 1 m [39 in.] to 11.28 m [37 ft.] available)	none
<b>Meter Dial</b>	0-2 mR/hr, or 0-5 kcpm, BAT TEST (others available)	0-10 mR/hr, BAT TEST

### Common Specifications

**METER DIAL:** 6.4 cm (2.5 in.) arc, 1 mA analog type

**MULTIPLIERS:** x0.1, x1, x10, x100

**LINEARITY:** reading within 10% of true value with detector connected

**AUDIO:** built-in unimorph speaker with ON/OFF switch (greater than 60 dB at 0.6 m [2 ft])

**CALIBRATION CONTROLS:** accessible from front of instrument (protective cover provided)

**HIGH VOLTAGE:** adjustable from 400-1000 volts

**THRESHOLD:** fixed at 40 mV ± 10 mV

**RESPONSE:** toggle switch for FAST (4 seconds) or SLOW (22 seconds) from 10% to 90% of final reading

**RESET:** pushbutton to zero meter

**POWER:** 2 each Procell PC 1300 "D" cell batteries (housed in sealed compartment, externally accessible)

**BATTERY LIFE:** typically greater than 2000 hours with alkaline batteries

**CONSTRUCTION:** cast and drawn aluminum with beige (Model 3-IS) or yellow (Model 3-IS-1) powder coat

**TEMPERATURE RANGE:** -20 to 40 °C (-4 to 104 °F)

**SIZE:** 16.5 x 8.9 x 21.6 cm (6.5 x 3.5 x 8.5 in.) (H x W x L)

**WEIGHT:** 1.6 kg (3.5 lb) including batteries

**CERTIFICATIONS:** - UL 913 Class I, II & III Division 1 Groups A, B, C, D

- CSA 22.22 No. 157

- UL 61010-1 CSA C22.2 No. 61010-1