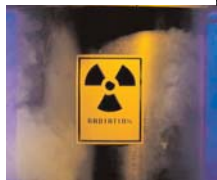


The Surveyor 50 is a portable survey meter designed for gamma/ x-ray exposure rate measurements and alpha, beta, gamma and x-ray count rate measurements with an appropriate GM probe and calibration.

Surveyor 50

Portable GM Survey Meter



- Alpha, beta, gamma and X-ray detection
- Single 9-volt battery
- Exclusive HV check
- Choice of GM probes
- Wide view meter
- Anti-saturation circuit
- Dead time compensation
- Calibration pot for each range



Rugged construction and quality components make the Surveyor 50 and 200 models durable, and the instruments are easy to service. Internal components are laid out on modular circuit boards. Span, HV and calibration pots (one for each range) are clearly marked.

The exclusive HV check assures the user the detector is operating at its proper high-voltage (critical for operation near the "edge" of a GM detector plateau).

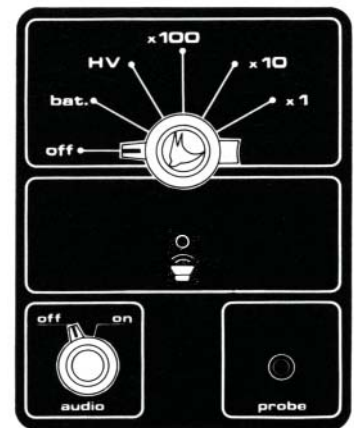
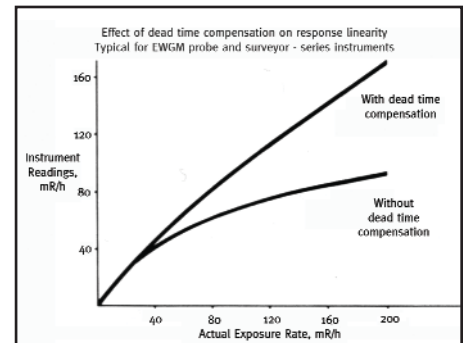
The anti-saturation circuit keeps the meter reading off-scale when the detector saturates in a high radiation field, providing an added safety margin.

Automatic dead time compensation assures the accuracy of higher exposure rate readings for linear response on all ranges.

A single 9-volt battery powers each instrument. The Surveyor 50 and 200 are compatible with all GM probes.

Surveyor 50 Specifications

Specifications	Detail
Radiation Detected:	Alpha, beta, gamma and X-ray, depending upon GM probe used
Detector:	Choice of GM probes
Range:	Three linear ranges: 0 to 0.5 mR/h 0 to 600 cpm 0 to 5 mR/h 0 to 6000 cpm 0 to 50 mR/h 0 to 60000 cpm
Accuracy:	Within 15% of reading for 137Cs between 25% and 100% of full scale on any range
High Voltage:	Electronically stabilized, factory set at 900 V
HV Test:	Exclusive self-test to verify detector HV power supply
Connector:	MHV
Warmup Time:	None
Saturation:	Typically >1000 R/h on all ranges (with exclusive anti-saturation circuit) for most GM probes; >5 R/h for pancake GM probes
Response Time:	Optimized for each range, 0 - 90% of final reading as follows: X1 12 sec X10 5 sec X100 2 sec
Dead Time Compensation:	Exclusive circuitry provides near-linear response
Temperature:	Operational from 40 to 60 °C (-40 to 140 °F)
Humidity:	<5% change in reading from 10 to 95% RH
Battery Complement:	Single 9-volt, MN 1604 or equal. The second battery clip may be used for storage of spare or parallel wire
Battery Life:	>100 hours or >200 hours with parallel option.
Control:	Six position rotary switch as illustrated; rotary on/off switch for audio option
Display:	Ruggedized, recessed high-torque 1 mA meter with 85 mm (3.35") scale marked as follows: 0 to 0.5 mR/h, 0 to 600 cpm, 'Bat. ok', 'HV ok'
Audio:	A built-in speaker (with panel mounted on/off switch) provides an audible "click" for each detector pulse. With the speaker off, an audible alarm sounds (if desired) when the meter is > full scale on any range. No separate battery is required.
Geotropism:	Within + 2% of full scale
Shock:	100 g per lightweight machine of MIL-STD 202C, method 202B
Vibration:	5 g in each of three mutually orthogonal axes at one or more frequencies from 10 to 33 Hz
Construction:	Splash proof, shock proof, two piece all metal case. Scratch resistant laminated control and Kleen Krome trim on case top. Durable black polyurethane paint on handle and case bottom. Stainless steel probe clip on handle.
Size:	173 H x 108 W x 203 D mm (6.8" H x 4.25" W x 8" D) including handle and probe clip
Weight:	1 kg (2.2 lbs) excluding probe



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