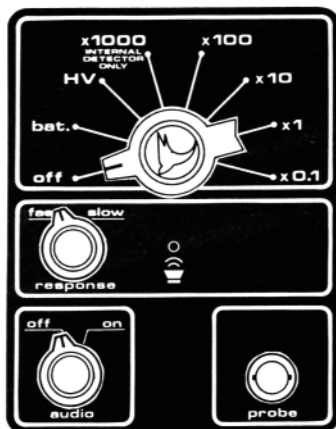
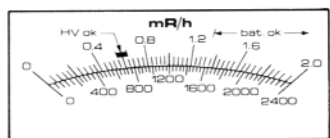


The Surveyor 2000 model is a portable survey meter designed for gamma/ x-ray exposure-rate measurements and alpha, beta, gamma and x-ray count-rate measurements with an appropriate GM probe and calibration.

Surveyor 2000

Portable Survey Meter

- Alpha, beta, gamma and x-ray detection
- Single 9-volt battery
- Exclusive HV check
- Choice of GM probes
- Variable response time
- Anti-saturation circuit
- Dead-time compensation
- Built-in audio
- Up to 2000 mR/h
- Exceeds 10 CFR35



The instrument combines an internal, energy-compensated GM tube (for the 2000 mR/h range) with a choice of external GM probes to meet or exceed the survey instrument requirements of 10 CFR35 for Nuclear Medicine.

Rugged construction and quality components make it durable and easy to service. Span, HV and calibration pots (one for each range) are clearly marked.

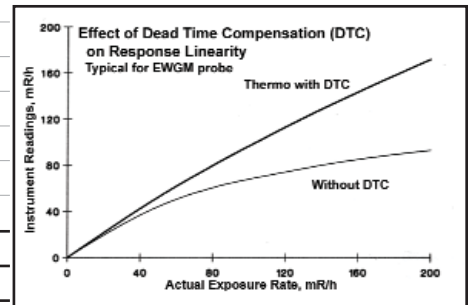
The exclusive HV check assures that the detector is operating at its proper high voltage (a safety feature and critical for operation near the "edge" of a GM detector plateau).

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 the instrument. An optional, license-exempt, uranium check source is available for use with the SURVEYOR 2000.

Surveyor 2000 Specifications

Specification	Benefit														
Radiation Detected:	Alpha, beta, gamma and x-ray, depending upon external GM probe used; gamma and x-ray with internal detector														
Detector:	Choice of GM probes, external; GM tube, internal														
Range:	0 - 0.2 mR/h 0 - 2 mR/h 0 - 20 mR/h 0 - 200 mR/h 0 - 2000 mR/h (internal Detector)														
Accuracy:	Within 10% of reading for 137 Cs when calibrated according to NRC Reg. Guide 10.8														
Energy Response:	+ 20% from 40 keV to 1.2 Mev (internal detector)														
High Voltage:	Electronically stabilized, factory set at 900 V														
HV Test:	Exclusive self-test to verify detector HV power supply														
Connector:	MHV														
Warm-up Time:	None														
Saturation:	Typically > 1000 R/h on all ranges (with exclusive antisaturation circuit) for most GM probes; > 5 R/h for pancake GM probes														
Response Time:	Switch-selectable, optimized for each range, 0-90% of final reading as follows:														
	<table border="1"> <thead> <tr> <th>Range</th> <th>Time</th> </tr> <tr> <td></td> <td><i>Fast</i> <i>Slow</i></td> </tr> </thead> <tbody> <tr> <td>X0.1</td> <td>6 sec 25 sec</td> </tr> <tr> <td>X1</td> <td>2 sec 6 sec</td> </tr> <tr> <td>X10</td> <td>1 sec 3 sec</td> </tr> <tr> <td>X100</td> <td>>1 sec 1 sec</td> </tr> <tr> <td>X1000</td> <td>>1 sec >1 sec</td> </tr> </tbody> </table>	Range	Time		<i>Fast</i> <i>Slow</i>	X0.1	6 sec 25 sec	X1	2 sec 6 sec	X10	1 sec 3 sec	X100	>1 sec 1 sec	X1000	>1 sec >1 sec
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X0.1	6 sec 25 sec														
X1	2 sec 6 sec														
X10	1 sec 3 sec														
X100	>1 sec 1 sec														
X1000	>1 sec >1 sec														
Dead Time Compensation:	Exclusive circuitry provides near linear response														
Temperature:	Operational from -40 to +140 °F (-40 to +60 °C)														
Humidity:	<5% change in reading from 10-95 % RH														
Battery Complement:	Single 9-volt, MN1604 or equal. The second battery clip may be parallel wired or used for storage of spare														
Battery Life:	>100 hours or >200 hours with parallel option														
Controls:	Eight position rotary switch as illustrated; two-position rotary switches for 'response' and 'audio'														
Display:	Ruggedized, recessed, high-torque 1 mA meter with 3.35" (85.1 mm) scale marked 0-2 mR/h, 0-2400 cpm, 'Bat. ok', 'HV ok' Meter protected by impact resistant polycarbonate window														
Geotropism:	Within + 2% of full scale														
Shock:	100 g per lightweight machine of MIL-STD 202 C, method 202 B														
Vibration:	5g in each of three mutually orthogonal axes at one or more frequencies from 10-33 Hz														
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														
Construction:	Splash proof, shock proof, two piece, all metal case. Scratch resistant laminated control panel and trim on case top Durable Black polyurethane paint on handle and case bottom. Stainless steel probe clip on handle.														



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USA:
504 Airport Road
Santa Fe, NM 87507
USA
(505) 471 3232
(505) 428 3535 fax

UK:
Bath Road
Beenham, Reading RG7 5PR
England
+44 (0) 118 971 2121
+44 (0) 118 971 2835 fax

Rest of Europe:
Frauenauracher Strasse 96
D 91056 Erlangen
Germany
+49 (0) 9131 909-0
+49 (0) 9131 909-205 fax

Rest of World:
Viktoriastrasse 5
D 42929 Wermelskirchen
Germany
+49 (0) 21 96 72 28 0
+49 (0) 21 96 72 28 24 / 25 fax