

# MODEL 200SB MODEL 200SB HTO

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The Overhoff Technology Corporation 200SB portable tritium survey monitor is a low cost light weight survey meter. The front panel features only three controls, an ON - OFF - SAMPLE switch and the switch for setting the alarm level. Zero adjustment is unnecessary, the 200SB shows no zero drift over a temperature range of 0° C to +50° C. A large pump and fast electronics are combined to give this instrument fast overall response.

## SENSITIVITY, RANGE, SPEED OF RESPONSE

This instrument is useful where measurement sensitivities of the order of 10  $\mu\text{Ci}/\text{m}^3$  (1 MPCA) is sufficient, and where wide range, and fast response are needed.

This low cost portable model has a 4 1/2 digit LCD display for readings from 0 to 19,999 MPCA.

## CONVENIENT FOR USE

The instrument needs no zero adjustment. It is ready for use by merely selecting the desired alarm level and activating the instrument power.

The initial power surge transient will disappear in a minute, the readings will then be accurate.

## GAMMA COMPENSATION

The use of twin, side by side, or coaxial ionization chambers provides good gamma compensation in moderate background gamma radiation fields.

## FAST RESPONSE

The use of a large pump, 3 liters a minute, together with fast electronics yields an overall measurement time constant of under 5 seconds.

## HTO DISCRIMINATION

An HTO discriminating version is available. By addition of an external desiccant column, this survey instrument will specifically measure HTO in the presence of HT, or other radioactive gases.



## WIDE RANGE MEDIUM SENSITIVITY TRITIUM IN AIR PORTABLE SURVEY MONITOR

Wide Range	to 199,999 $\mu\text{Ci}/\text{m}^3$ (19,999 MPCA)
Resolution	10 $\mu\text{Ci}/\text{m}^3$ (1 MPCA)
Fast Response	3 second time constant
Gamma Compensated	dual side-by-side chambers
No Zero Drift	
Rapid Warm Up	

# MODEL 200SB

## MODEL 200SB SPECIFICATIONS

### PERFORMANCE SPECIFICATIONS

MEASUREMENT RANGE	10 – 199,999 $\mu\text{Ci}/\text{m}^3$ , basic sensitivity of the order of 10 $\mu\text{Ci}/\text{m}^3$
DISPLAY	0 – 19,999 digits, LCD panel meter
GAMMA COMPENSATION	two chambers in a side by side arrangement
RESPONSE RATE	5 seconds to reach 90 % of final reading,
NOISE LEVEL	$\pm 10 \mu\text{Ci}/\text{m}^3$ , 1 S.D. (3 second electronic time constant)
ZERO STABILITY	after 1 minutes (or less) warm up, the zero drift to less than 10 $\mu\text{Ci}/\text{m}^3$
ALARM (ACOUSTIC) signal of 20 – 10,000 $\mu\text{Ci}/\text{m}^3$ , steady tone	1. nine position stepped attenuator set point for 2. low flow produces a steady tone
ALARM (VISUAL)	signal level: red LED low flow: yellow LED low battery: red LED
DUST FILTER	in line disposable cartridge Pall No. 12082
SAMPLING SYSTEM	2 hose barb ports are located on the front panel
IONIZATION CHAMBER VOLUME	effective volume: 200 $\text{cm}^3$ port to port volume: 220 $\text{cm}^3$
PUMP	Special high volume internal pump for a flow rate from 2-3 LPM
POWER	two "D" size batteries alkaline, carbon-zinc or NiCd,
ENVIRONMENTAL	0° C to +50° C, 0 - 98 % RH
CASE	light weight aluminum
SIZE AND WEIGHT	7.6" L, 5.2" W, 4.4" H excluding handle, 5 lbs (2.3 kg)
ACCESSORIES	sniffer hose
OPTIONAL EQUIPMENT	transit case jack for external power supply



### NOBLE GAS OR HTO SPECIFIC MODEL 200SB-HTO

A special version of the basic 200SB instrument with six hose connections is available for specific HTO measurement in the presence of HT or other radioactive gases as well as external and internal gamma fields.

**PARTS LIST FOR MODEL 200SB TRITIUM MONITOR**

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PARTS LIST**

<u>Qty Req'd</u>	<u>Part No.</u>	<u>Description</u>
2	1020686	Ionization Chamber
1	50085	Pump
1 to 5	22BH-4-2	Hose Barb, Sample-In
1	230-4-2	Hose Barb, Sample-Out
1	DMO-742	Digital Panel Meter
2	B16	Battery Holder
2	B1-XC	Battery Cap
2	EN95	Batteries, D-Size Alkaline, Primary Power
4	415	Batteries, 45V Polarizing
1	12082	In Line Dust Filter, Pack of 3
1	CLIC-51	Dust Filter Clip
1	PSF-100A-0.5	Pressure Switch
1	MSR320	Alarm Speaker
2	20-3320	Control Knob, Cap and Skirt
1	KU402B1/8	Zero Knob

