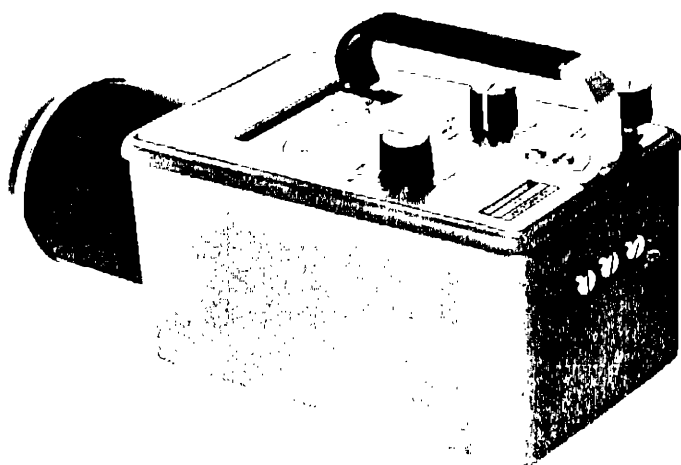




Model 471 Sensitive, Wide Range Survey Meter



VICTOREEN, INC.
 A Subsidiary of Sheller-Globe



- 1 mR/hr Most Sensitive Full Scale Range.
- Integrate and Rate Capability.
- Energy Corrected from 6 keV to 2 MeV.

The Model 471 is a more sensitive version of widely accepted model 470A. Featuring a 1 mR/hr full scale sensitivity the 471 is housed in a rugged metal case with all controls and meter conveniently located on the top. Its excellent energy response and wide dynamic range suggest many health physics uses.

Specifications

Radiation Detected: Alpha above 3.4 meV, beta above 70 keV, gamma and X-rays above 6 KeV

Operating Ranges: Rate: 12 overlapping ranges. 0-1, 3, 10, 30, 100, 300 mR/hr and 1/hr. Integrate: 6 overlapping ranges. 0-1, 3, 10, 30, 100, 300 mR.

Precision: Within 10% of full scale over total temperature, humidity pressure range at a given energy.

Response Time: 90% of final reading within 8 sec. on 1 mR/hr range, 3 secs on 3 mR/hr range decreasing to less than 1 sec. on all other ranges.

Calibration: Within 10% on single point ¹³⁷Cs.

Geotropism: Within 2% of full scale any orientation

Energy Dependence: Within 10% for gamma from 6-3000 keV, cap off, within 10% from 25 keV to 2 MeV cap on

Environmental Effects: Temp. limits: -30° to +50°C using alkaline batteries below 0°C. Temp. dependence: within 0.2%/°C Humidity Limits: 0-99% non condensing.

Initial Stabilization Time: Less than 1 min. due to dielectric absorption.

Detector: Unsealed air ionization chamber with 1.1 mg/cm² mylar end window. Supplied with protective cover of tissue equivalent plastic 300 mg/cm²

Display: 7.9 cm (3-1/8") taut band meter.

Battery Complement: Two 1.5 volt "D" cells and four 22.5 volt No. 505 batteries included.

Battery Life: "D" cells on mR range, more than 150 hrs. at 24 hr/day, 210 hrs. at 8 hr/day. On R/hr range 85 hrs. at 24 hrs/day or 120 hrs. at 8 hrs/day. No. 505 batteries shelf-life (approx. 1 year) Battery check function built in.

Controls: External: 3 position function switch, 8 position range switch, zero set and adjust knob. Internal: collecting voltage "check" switch, coarse zero adjustment, calibration adjustment

Check Source: None supplied.

Construction: Rugged impact resistant metal case.

Dimensions: 29 cm long, 12 cm wide 19.4 cm high (11-1/2" x 5-1/8" x 7 5/8")

Weight: 2.2 kg (4.9 lbs) net, 5 kg (11 lbs) shipping

