RO-20 Ion Chamber Survey Meter

With five linear ranges of operation the portable air ionization instrument detects beta, gamma and x-radiation. The unique ionization chamber is vented to atmospheric pressure and is specifically designed to have a flat energy response into the x-ray region.

Product Detail

Features:
- Measures Gamma or X-ray exposure rate
- Large Backlit Display
- Non-Mechanical Range Switching
- Long Battery Life
- Temperature Compensated Measurements

Detector
- Five linear ranges: 0-5, 0-50, 0-500 mR/hr; 0-5, 0-50 R/h
- Air filled ionization chamber vented to atmosphere
- Detector Volume 13.4 in³
- 1,000 mg/cm² walls
- Chamber window 7 mg/cm²
- Beta shield 1,000 mg/cm²
- +/- 30% from 8 keV to 6 MeV
- +/- 15% from 33 keV to 6 MeV

External Controls
- Rotary switch for Off, Battery 1 Check, Battery 2 check, Zero, 5, 50, 500 mR/h; 5-50 R/h
- Light switch
- Zero knob

Physical
- Size: 7.9" long x 4.2" wide x 7.7" high
- Size: 20.1 x 10.7 x 19.6 cm
- Weight: 3.6 lbs with batteries (1.6 kg)

Options
- Check Source (CS-7A)

Specifications:

Radiation Detected: Beta, gamma, and x-ray.
Ranges: Five linear ranges: 0-5, 0-50, 0-500 mR/hr and 0-5, 0-50 R/h.
Meter: Scale length, approx. 3 inches (7.6 cm), 2% accuracy. Linear markings from 0 to 5 in 50 minor increments.
Response Time: 90% of final reading within 5 seconds; see options below for faster response.
Linearity: Within ± 5% of full scale.
Battery Dependence: Reading is independent of battery voltage when the battery check indication is in the green arc.

External Controls: Range switch, including Off, Zero, and Battery checking positions. Zero knob used to set meter to zero when Zero position of range switch is selected or when in no significant radiation field. Light switch, for meter light.

Internal Controls: Five calibration controls, one for each range.

Batteries: Main power: Five "C" cells.
Chamber Bias: Ten 3 volt lithium coin cells, 30 volts.
Temperature: Operable from -40 °F to 140 °F (-40 °C to 60 °C). For operation below 0 °F (-18 °C), alkaline

http://www.thermo.com/com/cda/product/detail/0,1055,15596,00.html
Temperature Compensation: The detector is fully compensated over the operational temperature range for output accuracy within 10% ± 0.5 mR/h.

Humidity: Operable from 0 to 95%, non-condensing.

Weight: Approximately 3.6 pounds (1.63 kg) with alkaline C cells.

Size: 4.2” wide x 7.9” long x 7.7” high (107 mm x 201 mm x 196 mm), including handle.