Thermo Fisher Scientific
Micro Rem and Micro Sievert Survey Frequently Asked Questions

Question: What is the Micro Rem and Micro Sievert Survey used for?
Answer: The Micro Rem and Micro Sievert models are portable survey meters for applications where accurate dose rate measurements of low gamma radiation levels are required. They read absorbed dose rate (or ambient dose equivalent rate) directly, eliminating the need for conversion from mR/h (or µGy/h).

Question: What is meant by tissue-equivalent survey meter?
Answer: The tissue-equivalent scintillator used in these instruments provides flat energy response calibrated in rem (or ambient dose equivalent H*(10)). This rem/H*(10) response is based on the deep dose equivalent index for 1 cm depth, unparallel directional beam as calculated on the ICRU standard sphere.

Question: What is the measurement range of the instrument?
Answer: The instrument gives tissue-equivalent photon response for x-ray and gamma radiation from environmental levels of 0-20 µrem/h (0-0.2 µSv/h) full scale up to normal survey levels of 200 mrem/h (2 mSv/h) full scale.

Question: What options are available?
Answer: Both the Micro Rem and the Micro Sievert Meters are available with a Standard or an Extended Probe and with Standard or Low Energy capabilities. A probe on the front of the lower case distinguishes the extended Probe option. The Low Energy option is distinguished by a window opening on the front of the lower case or on the front of the probe. The expanded low energy response option extends the instruments low energy cutoff to 17 keV verses 40 keV for the standard instrument.

Question: What additional controls are available to the user.
Answer: A switch-selectable Audio function provides audible pulses and full-scale alarm. A three-position response time switch provides adjustable meter response on all dose ranges.

Question: What is the sensitivity of the detector?
Answer: The sensitivity is 1.7 cps/µR/h (170 cps/µSv/h) or 100 cpm/µR/h