SCINTILLATION PROBES GAMMA Na(Tl) & X-RAY

• PGS-3

Gamma Scintillation Probe utilizing a highly gamma sensitive crystal (NaI(TI)). 1" diameter x 1" long hermetically sealed crystal optically coupled to photomultiplier tube. Gamma sensitivity is 100 times greater than GM tubes Will also detect X-rays > 25KeV.

PGS-3-SUB

Same as PGS-3 but ruggedized and waterproof. Can sustain immersion for more than 1 hour.

PGS-3L

Same as the PGS-3 except it has a 2" x 2" crystal. Eight times the sensitivity of the PGS-3. Since sensitivity of the PGS-3L is in the order of 1,000,000 cpm per mR/hr, probe should only be used with instruments allowing high count rates, or having background suppress circuits (PUG-7E) or pulse height selection circuit (PRS-5 or FS-5T).

PGS-3L-SUB

Same as PGS-3L but ruggedized and waterproof. Can sustain immersion for more than 1 hour.

PGS-3T

Low Energy Gamma Scintillation Probe, 1" diameter x 1mm NaI(TI) crystal protected by a 5 mil. aluminum window, sees X-rays and Gammas > 10KeV and Betas > 100KeV.

PGS-22

Low Energy Gamma Scintillation Probe with built in linear and discriminator maximizes sensitivity to low energy gamma radiation and allows use with gamma spectrometers. Thin crystal (2" diameter x 2mm thick) decreases sensitivity to background. The internal linear preamp is powered by a long life battery (6 months of normal operation) and may be used with portable instruments, such as the PUG-7 and with line operated instruments not furnishing power for preamp. Sees X-rays and Gamma >10KeV.

PGS-3I

This Low Energy Gamma Probe incorporates a 37mm x 2mm NaI(TI) crystal and thin (5mil) window for use with T/A's iodine localizer and monitor as well as other systems requiring sensitivity to low energy photons, such as those from I-125 as well as sensitivity to high energy photons, such as I-131 and other isotopes. It is designed to accept shields and collimators and to couple to charcoal impregnated cartridges or filters for determining total radioiodine content of air, both gaseous and particulate. Sees X-rays and Gamma >10KeV.

PGS-3x3

Sensitive Large Crystal Gamma Scintillation Probe. Over 21 cubic inches of NaI(TI) makes this probe very useful for truck, vehicle, exit, and remote monitoring. Rapidly detects minute changes in very low ambient radiation fields. Includes 3" x 3" diameter NaI(TI) crystal and optically coupled photomultiplier tube. The highly efficient crystal with large active volume provides background rate of approximately 60,000 cpm. Therefore, probe



PGS-I

PGS-3, PGS-3-SUB, PGS-3T









SCINTILLATION PROBES GAMMA Na(Tl) & X-RAY

should be used only with instruments allowing high count rates, or having background suppress circuit (PUG-7E) or pulse height selection circuit, such as the PRS-5 and the FS-5t.

PGS-32T

Low Energy Gamma Scintillation Probe. The thin crystal (55 mm diameter by 2 mm thick) decreases sensitivity to background while maximizing response to X-rays and low energy photons *KeV being examined. This probe may be used with portable instruments such as the T/A PUG-7 and PRS-5 and with line operated instruments as well as with all other systems designed for Geiger and scintillation counting. Sees X-rays and Gamma *KeV.

PGS-3IBe

Very Low Energy Gamma and X-Ray Probe. 1.5" diameter x 1mm thick NaI(TI) probe. Sees X-rays and Gammas > 6KeV.

PGS-3TBe

Very Low Energy Gamma and X-Ray Probe. 1" diameter x 1mm thick NaI(TI) probe. Sees X-rays and Gammas > 6KeV.

PGS-3LS

LED Stabilized for pulse height. 2" diameter x 2mm NaI(TI) probe.

PGS-3LW

Low Energy Gamma Scintillation Probe with a well. It yields high count efficiency for liquid and solid samples. The well is 1.5" deep by 21/32" in diameter, accepts vials and test tubes and is set within the probe's NaI(TI) crystal, which has 2" diameter x 2" thick. The well is lined with 0.01" aluminum. Used with model SSS-11.

PGS-8M

Plutonium Spot Detector A 1/4" diameter x 2mm thick Nal(TI) scintillation crystal is coupled to a PM tube with spectrally matched light pipe. The crystal, light pipe, and a collimator are contained within the 3/4" diameter x nominal 1.5" long detector assembly. The detector is mounted at the end of a 2" diameter by 10" long handle which contains PM tube, dynode string and pre-amplifier.



PGS-IBe, PGS-3TBe





