SCINTILLATION PROBES - NEUTRONS

PNS Series Models - PNS-19; PNS-20; PNS-20-HL; PNS-1947



PNS-1947



PNS-19 and PNS-20

DESCRIPTION:

SCINTILLATION PROBES (NEUTRONS):

- **PNS-19:** Fast Neutron Scintillation Probe insensitive to Gamma radiation in fields below 100 R/hr. The n-p reaction is used to measure energy deposited by Neutrons. A shaped light pipe and moderator about the ZnS.Ag phosphor gives a consistent Rem to count ratio for incident Neutrons energy range 15 MeV and above, within ± 30%.
- **PNS-20:** Slow Neutron Scintillation Probe. Thermal Neutrons are detected by means of the boron n-alpha reaction. Probe delivers approximately 60 cpm per neutron/cm²/second and requires a 900-volt supply. The probe is 8" long x 2" in diameter. It is completely insensitive to Gammas in energy range fields below 10R/hr.
- **PNS-20-HL** Both Slow (Thermal) and Fast Neutron Scintillation Probe. Thermal Neutrons are detected by means of the boron n-alpha reaction. Probe delivers high efficiency with 2" diameter x 2" width x 44" long plastic scintillation bar and photomultiplier (PM) tube. Requires a 900-volt supply. It is completely insensitive to Gammas in energy range fields below 10R/hr.

To measure fast Neutrons, use the PNS-19 or PNS-1947 probes.

PNS-1947: Fast Neutron Scintillation Large Area Probe insensitive to Gamma radiation in fields below 100 R/hr. The n-p reaction is used to measure energy deposited by Neutrons. A shaped light pipe and moderator about the ZnS.Ag phosphor gives a consistent Rem to count ratio for incident Neutrons energy range 15 MeV and above, within ± 30%. Sensitive diameter 125 mm

