

PORTABLE ALPHA SPEC Model # BAM-STAM-3Z



FEATURES:

- COUNTS: WIPES, FILTERS and PLANCHETS
- REPEATABLE GEOMETRY
- SEALED SAMPLE DRAWER

PROCEDURE: User places sample into small holder onto the replacement membrane (provided) and slides sample holder between solid state Alpha Spec Detector and above thin window NaI(Tl) Scintillation Detector. Pulses from the Alpha Detector go to a charge sensitive amplifier and into an energy analyzer with two regions of interest.

For Example:

Region I: 5.00 to 5.30 MeV for Pu-239 Alpha. Region II: 5.30 to 5.60 MeV for Pu-238 and Am-241 Alpha.
Region III: 40-80 KeV for Am-241 Gamma.

Pulses from the NaI(Tl) scintillation detector go through an amplifier and single channel analyzer to select for pulse height. For Example: 40-80 KeV for Am-241 Gammas.

Pulses from these 3 channels go to counters A, B, and C respectively on PCI card. Plugged into a standard slot on the portable PC. Typically, the user supplies the portable PC and the data analyzer software. However, Technical Associates is pleased to offer portable PC and software if requested.

Technical Associates typically uses Lab Tech Notebook software environment which allows the user to easily modify our software without the need of skilled programmers.

SPECIFICATIONS:

- Alpha Detector:** Solid State Alpha Detector - 490 mm²
- Resolution:** 60 KeV maximum
- Sample Holder:** Sealed Drawer
- Counting Efficiency:** 20% of 2Pi
- Gamma Membrane:** 0.9 mg/cm² aluminized Mylar or .0005" stainless steel or per user requirement.
- Gamma Detector:** Model PGS-3T NaI(Tl) Scintillator
- Crystal Size:** 25mm dia. x 1 mm thick NaI(Tl)
- Electronics:** MGA-5202/3BX, 3 independent energy analyzers, 2 independent detector bias voltage supplies.
- PCI-BR:** Connector box from amplifiers to PCI card.
PCI card with 3 counters plus internal clock.
Fits in standard Type II slot.
- Options:** Portable PC: Supplied by Technical Associates or user.
Data Analysis Software: Supplied by Technical Associates or user.

TA **TECHNICAL ASSOCIATES**

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