

Model Series - NEX-BETA-ABG Series

NEX-BETA-ABG - NEX-BETA-ABG-9 - NEX-BETA-ABG-9TT

Problem

Drinking water sources are vulnerable to accidental or knowing contamination by individuals, groups, industry, medical labs, terrorists, and from naturally occurring radioactive materials (NORM). As yet very few water districts have real-time radiation monitors in place to protect the water and the public.

Solution

- For the first time in a **Continuous Real Time** monitor the **Nex-Beta-ABG series** solves this problem by continuously monitoring water using ultra-sensitive, radiation detectors.
- The information from these detectors is analyzed and displayed in units of picoCuries per liter.
- Monitors drinking water against most radioactive contaminants except H-3, C-14, S-35, Fe-55.

Nex-Beta-ABG-9 and Nex-Beta-ABG-9TT:

- The count times are user settable. Calculations are automatically updated every 2 minutes, every hour and every day. Measurements of radiation concentration are logged 24 hours/day, 7 days/week in. The longer update times correspond with greater precision and increased sensitivity.
- Sensitivities in the daily updates meet or exceed the DHS **PAG** (Protective Action Guideline Levels) for drinking water.
- The **Nex-Beta-ABG-9TT system is a Test and Treat system removing biological contaminations and reducing radioisotopes.**

Description

Model **NEX-BETA-ABG Series** monitors are radiation detecting water monitor /controllers for measuring of Alpha, Beta and Gamma emitting radio nuclides. The electronics are microprocessor with LED/LCD display. The system is covered by TA's full one year warranty. On-site service contracts available in many areas.

The Alpha, Beta flow cell and Gamma detector are easily changed via disconnect fittings. All connections are sealed against leaks. The standard water moving system is based on a high precision pump. It has a 10 liter per minute capacity. System can also be operated using city water pressure in which case no pump is required.

A wide range of pump capacities are available to meet users' specific needs. The system detectors and electronics are ruggedly built. It comes complete with all cabling tubing and connectors in place and is ready to operate. 115 Volt 60Hz is standard; 220 Volt 50/60 Hz or battery operations are optional.


Detectors In This System

1. **Alpha-Beta Detector** consists of a light-tight detector assembly which interfaces with the sample via quick disconnect coax cables and medical grade hoses. The sample is viewed by a matched pair of 5" diameter photo- multiplier tubes.
2. **Gamma Scintillation detector** has a sensitive 2" diameter crystal.
3. **BioSensor for the Nex-Beta-ABG-9TT**

The **Alpha-Beta pulse analysis portion** of this system conditions and analyzes the output from the photo-multiplier tubes by pulse height, duration and coincidence; thereby permitting the system to exclude most background and noise counts. Sensitivity is enhanced by the use of stochastic resonance plus high gain, low noise PM tubes and pre-amps.



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