Drinking Water and Waste Water Gamma Radiation Monitor

Models - NEXGAMMA-2, NEXGAMMA-2G, and NEXGAMMA-2LE

Solution

For the first time in a **Continuous Real Time radiation monitor** the TA's **NEXGAMMA-2** solves this problem by continuously monitoring water using Gamma radiation scintillation detectors with (NaI) crystals.

- Information is analyzed and displayed in units of picoCuries per liter. User settable measurement units.
- Calculations are updated every minute, every hour and every day.
- Longer update times correspond with greater precision and increased sensitivity.
- Sensitivities meet or exceed DHS Protective Action Guideline Levels.
- TA Tried and True sample collection and measurement technology measures Gamma from any radioactive liquids.
- Measurements of radiation concentration and total discharge are logged 24 hr/day, 7 day/week.
- Determines and identifies individual radionuclides.

Description

The NEXGAMMA-2 Monitors come with three detector choices:

NEXGAMMA-2, NEXGAMMA-2G, NEXGAMMA-2LE. Please see the following charts for details.

The **NEXGAMMA-2** is a multi-channel water monitor/controller for measuring of Gamma-emitting radionuclides. It simultaneously measures individual Gamma isotopes. The electronics are microprocessor with color LCD display. The pre-amps are plug in modules allowing change or addition of functions at a later date, and allow rapid repair by module replacement in the field. The modular system is covered by TA's unique exchange warranty system in addition to the full one year warranty. On-site warrantees available in many areas.

Detector shields are made of (2") welded steel or aluminum housing suitable for filling with lead or other material. They are designed for a long useful life and easy decontamination. Gamma Spec shield can be opened for cleaning with little effort. All connections are sealed against leaks. The standard water moving system is based on a high precision pump with a 2.5 liter flow through helix or optional 20 liter tank.

Three Ways for Continuous Real-Time Monitoring of Gamma Radiation in Water How To Select The Optimum Method

1. Put submersible probe directly into the river or lake - Optional

Pro: It is simple, No pump needed, the lake acts like a very high volume tank, so system sensitivity will be good **Con:**

- Submersible probes cost more, can break or leak or be contaminated easily, and a valuable detector may be subject to theft
- User must do his measurement next to the lake or install special signal transmission
- Submersible probe only works if there is a river, lake, or sump. It is not useful for water flowing in a pipe

2. Pump water into a tank with a probe in the center - Optional

Pro: A big tank can give good sensitivity

Con:

- A big tank can have slow "wash-out" characteristics. This means that the 'new' tank water currently being measured may contain residual water from previous measurement activity
- Overtime the tank may collect sand, algae or other contaminants. Therefore an uncontaminated/CLEAN tank may be difficult to thoroughly clean and expensive to replace





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