

Down-Hole Tritium in Water Detector

Model # SSS-33DHC

Now 5 models to choose from



SSS-33DHC

Features

- Features:
- **Enhanced Sensitivity – Well-head Series**
- Sensitive Below Epa Clean Drinking Water Levels
- Fits In CPT Bore Hole (Cone Penetration)
- Continuous Monitoring – 24/7 Days/week
- Real Time
- Not Influenced By Other Nuclides
- No Liquid Scintillant Required

Application:

- Early Detection of Underground Plume or Tritium Leakage
- Reassure the Public by Continuous Monitoring of Drinking Water Sources

Detectors and Detection Flow-Thru Cell:

There are many thousands of bore holes in the United States which could or should be monitored for tritium. The water in these bore holes cover a wide range of tritium concentrations. From highly contaminated to very clean. Current bore hole sampling and lab test methodology, involves taking a sample and sending it to a lab for measurement which is precise, but also slow and expensive. Technical Associates SSS-33DHC Detectors automate, (and bring down the cost) of monitoring these bore holes.

Description

This System consists of a small diameter, water tight detector assembly with pump plus processor. The sample is passed through a deionizer and filter and thence to the scintillation crystals in the flow cell which is viewed by a matched pair of photomultiplier tubes.

WELL-HEAD (WH) SERIES monitors have the same function as the other models, but they all have significantly higher sensitivity with reduced maintenance by the simple expedient of placing only the pump down the hole and bringing the detection cell, filtration and amplifiers up to the surface where they can sit along side the readout and data transmission package which was already on the surface at the WELL-HEAD.

The process portion of this system conditions and analyzes the output from the photomultiplier tubes by pulse height and coincidence, thereby permitting the system to eliminate counting most background and noise counts. Sensitivity is enhanced by use of stochastic resonance plus high gain, low noise PM tubes, and preamps.

SUB-SYSTEMS: Down-hole tritium measurement system involves the following subsystems.

Sonde-casing, sample water filtration and deionization pump, detectors & detection flow thru cell, plumbing, preamplifiers, amplifiers & electronic pulse analysis, detector bias supply, cables, data presentation, storage & transmission, and system power. The electronics displays count-rate, total count and elapsed count time at the well head. The data is transmitted in RS-232 format. Data is printed out on a digital printer with date and time stamp.



TECHNICAL ASSOCIATES
OVERHOFF TECHNOLOGY

7051 ETON AVENUE, CANOGA PARK, CA 91303

P: 818-883-7043 | F: 818-883-6103 | C: 818-836-0381

SALES@USNUCLEARCORP.COM | TECH-ASSOCIATES.COM | USNUCLEARCORP.COM

DIVISIONS OF



USNUCLEARCORP