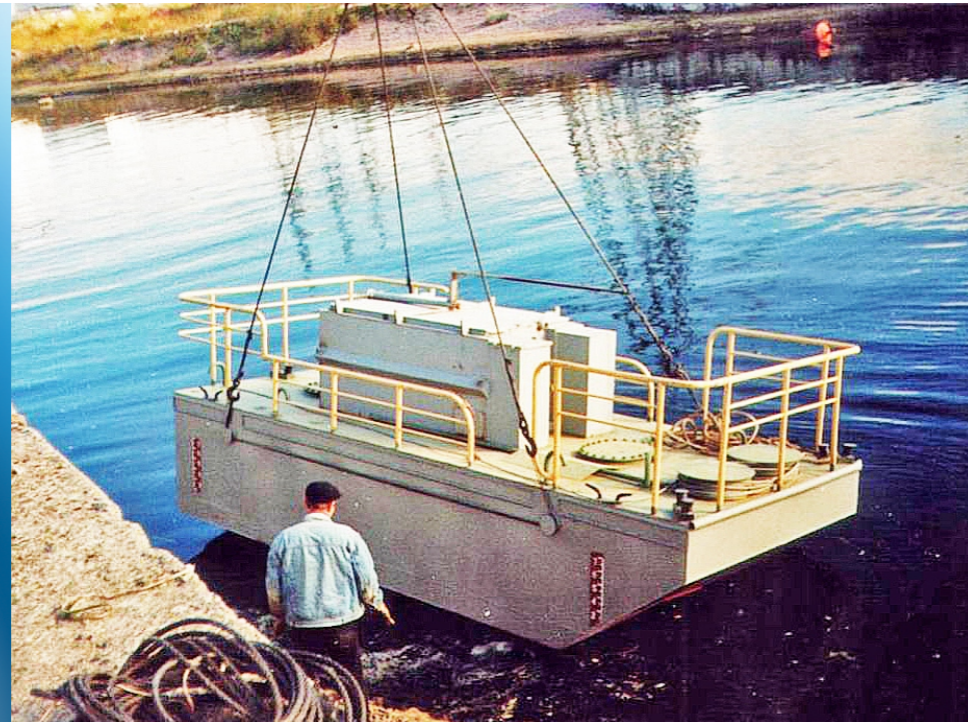




Specification



| Parameter | Value |
|--|-----------|
| Energy range, keV | 50 - 3500 |
| HPGe detector efficiency, % | 38* |
| Energy resolution for 30% efficiency detector, keV at energy | |
| 122 keV | 1.0 |
| 1.33 MeV | 1.9 |
| Detection limit for ¹³⁷ Cs radionuclide specific activity, measurement time 1 hour, Bq/m ³ | 200 |
| ¹³⁷ Cs radionuclide specific activity measurement error for measurement time 1 hour, % | 30 |
| Integral nonlinearity, % | 0.05 |
| Instability of specific activity measurement from calibration source, % | 10 |
| Time of operation mode setting, h | 0.5 |
| Time of continuous operation, days | 30 |

* HPGe Detectors are available with efficiency from 10% to 160%

Automated System for Water Activity Measurement

Application

Automatic monitoring of gamma-ray radionuclide specific activity directly in water reservoirs in the regions of nuclear weapons testing, near nuclear storage, nuclear power plants and other objects of nuclear energetics

Features

- High sensitivity of radionuclide activity detection
- Full autonomy of measurement station data transfer via radio channel or cable channel into the point of information receiving, processing and archiving
- Operation simplicity and system high reliability
- Dewar vessel filling one a month
- Data transfer through radio channel or cable
- Total activity transmit every minute, spectrum transmit every hour

Complete set

Floating monitoring station that is situated on the platform on pontoon and contains:

- Gamma-ray spectrometer based on submerged high purity germanium or scintillator detector;
- Transmitter receiver;
- Microprocessor device for interfaces necessary for automatic operation, self-diagnostic, calibration;
- Backup accumulators (up to 100 hours);
- Accessories for station control, calibration.

Station for receiving, processing and archiving information including:

- Radio station;
- Decoding modem connection device with personal computer;
- Software for spectra description, nuclides identification, calculation of their specific activity;
- Internal memory for data storage;
- Metrological assurance, set of accessories and necessary instruments.

Baltic Scientific Instruments
 Ramulu str. 3
 Riga, LV - 1005
 Latvia

Phone: (+371) 67383947
 Fax: (+371) 67382620
 Email: sales@bsi.lv
 www.bsi.lv

