



RESEARCH AND PRODUCTION ENTERPRISE "AKP"

- Design, manufacturing and installation of γ and β spectrometers of ionizing radiation
- Methods of samples preparation
- Application software
- Warranty and post-warranty service
- Trainings and consulting

SCINTILLATION GAMMA - SPECTROMETERS SEG-001-«AKP-S»



LABORATORY TESTING
environmental, food industry



MEDICINE, VETERINARY



METAL INDUSTRY
Steel, Fe and Al

SEG-001-«AKP-S»-150



SEG-001-«AKP-S»-63



SEG-001-«AKP-S»-40



^{131}I , ^{103}Ru , ^{106}Ru , ^{144}Ce , ^{137}Cs , ^{134}Cs ,
 ^{226}Ra , ^{232}Th , ^{40}K , ^{222}Rn and others

**EXPERT AND EXPRESS RADIATION CONTROL OF
FOODSTUFF, WATER, BUILDING MATERIALS AND OTHER
SAMPLES ACCORDING TO THE ANY NATIONAL
REGULATION IN NATIVE SAMPLES**

EXPRESS CONTROL

A few minutes **express control** for not exceeding of permissible levels in native sample

For sample volume 1L and permissible level 40 bq/kg **less than 1 min**

EASY OPERATED

Shield design is **convenient in operation** and transportation.

User-friendly software lets **minimum skilled operators** make routine measurements.

ADAPTIVE

3 sizes of detector according to Customer's needs

Can be used in **regular and mobile** laboratory

Permissible **levels can be set** at software

SPECTROMETER



SEG-001-«AKP-S»-40



SEG-001-«AKP-S»-63



SEG-001-«AKP-S»-150

Time of measurement for not exceeding of permissible levels by different detectors

Detector (Ømm)	40	63	150
Sample volume (l)	0,5 l	1 l	1 l
Permissible levels (Bq/l, Bq/kg)	40	40	40
Time of measurement, Less than	4 min	1 min	1 min

SPECIFICATION

Description	SEG-001-«AKP-S»-40	SEG-001-«AKP-S»-63	SEG-001-«AKP-S»-150
Energy range of gamma-rays, MeV	0.1-3.5	0.1-3.5	0.1-3.5
Energy resolution by 0.661 MeV (¹³⁷ Cs), %	<9	<9	<9
Integral nonlinearity, %	<1	<1	<1.5
MDA by external background 15 mR/h by 1 hour for ¹³⁷ Cs, Bq	10 (0.5 l vessel)	1.2 (1 l Marinelli)	0.9 (1 l vessel)
Number of analyzer channels, not less than	1024; 2048	1024; 2048	1024; 2048
Power supply	220V, 50Hz (110V, 50Hz)	220V, 50Hz (110V, 50Hz)	220V, 50Hz (110V, 50Hz)
Weight, kg	52	200	800
Power consumption	250Wt	250Wt	250Wt

MODIFICATIONS



**FLOOR
INSTALLATION
CAN BE FIXED
AND USED
IN MOBILE
LABORATORY**



**REMOVABLE
COVER IS
CONVENIENT
TO USE
FOR FLOW
MEASUREMENTS**



**ON A MOBILE
PLATFORM, TO
MEASURE RAW
MATERIALS AT
PROCUREMENT
POINTS**

SOFTWARE «AKWIN»

«AKWin» software is designed for control of measurements and automatic spectra processing. «AKWin» software lets minimum skilled operators make routine measurements and at the same time is a universal means for professionals who conduct nuclear researches.

- Measurement control
- Spectrums treatment
- Documentation of proceeding results
- Possibility to transfer report to standard editor
- Providing of spectrometer calibration
- Possibility of work with radionuclides library
- Providing of measurement quality
- Possibility to data transfer to database
- Possibility to provide automatic analysis of not exceeding permissible level of radionuclides in food

PROFESSIONAL SOLUTIONS FOR RADIATION CONTROL AND MONITORING

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