



## SURVEY METER MKC-A07

GENERAL-PURPOSE PORTABLE INSTRUMENT FOR SEARCHING SOURCES AND MEASURING CHARACTERISTICS OF ALPHA, BETA AND GAMMA RADIATION FIELDS

### INTENDED USE

- Search for sources of gamma radiation, determination of surface contamination with alpha and beta emitting radionuclides
- Measurement of gamma radiation ADER, alpha radiation flux density, beta radiation flux density
- Estimation of the safe period for personnel in the measurement area

### APPLICATION

- Operational detection of unauthorized trafficking of nuclear and radioactive materials to facilities and territories in order to ensure their anti-terrorist protection
- In radiological laboratories, as part of a mobile radiation monitoring system

### DESIGN

MKC-A07 is a compact multipurpose instrument based on gas-discharge counters. The instrument is easily operated with buttons on its handle.

MKC-A07 uses USB 2.0 or optional wireless communication to transfer measured data to external devices. When connected via USB 2.0, the MKC-A07 survey meter also charges.

With its high level of ingress protection, light weight, and a wide range of operating temperatures, the MKC-A07 survey meter supports operation in harsh field conditions.

### KEY FEATURES

- All-in-one: simultaneous measurement of alpha, beta and gamma radiation
- Independent measurement channels with gamma compensation in the beta channel
- User-friendly interface that does not require specialized knowledge in radiation measurements
- Strong operator's safety features
- High resistance to environmental effects
- Non-volatile measurement log with reference to real time and geographic coordinates (option)





## MKC-A07

### SPECIFICATIONS

Detectors type	gas-discharge counters
Alpha-detector window area	7 cm <sup>2</sup>
Beta-detector window area	39 cm <sup>2</sup>
Alpha radiation registration efficiency, 5.15 MeV, not less than	34 %
Beta radiation registration efficiency (for <sup>90</sup> Sr/ <sup>90</sup> Y), not less than	50 %
Gamma radiation sensitivity (for <sup>60</sup> Co), not less than	21 s <sup>-1</sup> per μSv/h
Measurement time at ADER level of 1 μSv/h (20 % variation coefficient)	1 second
Gamma ADER measurement range	0.05 μSv/h to 50 mSv/h
ADER measurement basic error limits	±15 %
Basic error limits of alpha flux density measurement	±30 %
Basic error limits of beta flux density measurement	±20 %
Ingress protection	IP65
Environmental	-40 to +50 °C, 95%
Dimensions	(198×92.5×123) mm
Weight	950 g
Run time on the built-in batteries, not less than	16 hours
PC connection	<ul style="list-style-type: none"><li>• USB 2.0</li><li>• ZigBee (option)</li><li>• GPS/GLONASS (option)</li></ul>

