

AT6130, AT6130A, AT6130B AT6130D, AT6130C

Hand-held small-sized instruments to measure ambient x-ray and gamma radiation dose equivalent and dose equivalent rate and beta radiation flux density from contaminated surfaces

Features

- Small weight and dimensions
- Interactive operation mode
- Audible and visual alarm at dose, dose rate or flux density threshold exceeding
- Rapid response to dose rate change (a new measuring starts)
- Selective beta and gamma radiation measuring in mixed fields
- Wide temperature operation under natural environment
- Beeping at every gamma quantum (beta particle) detection while ionizing radiation sources are searched
- Keeping up to 2000 measurement results with the measurement date and time in the nonvolatile memory
- Measurement result, current date and time and low battery symbol on a matrix LCD
- Data transfer to PC via IrDA interface

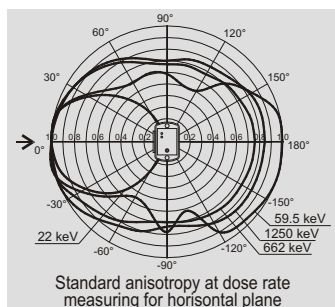
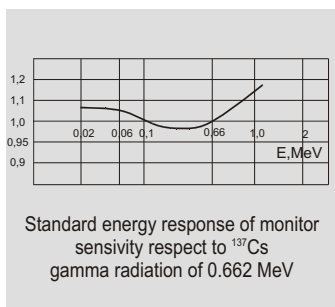
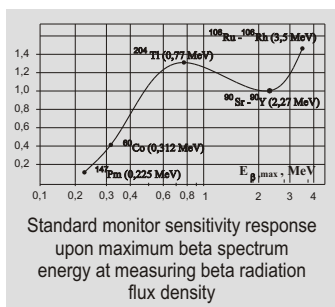
RADIATION MONITORS

0.1 μ Sv/h - 10 mSv/h
10 - 10⁴ particle/(cm² · min)
x & γ : 20 keV - 3 MeV; β : 155 keV - 3.5 MeV



Application

- Radioecology
- Emergency
- Civil defense
- Fire brigades
- Emergency
- Customs
- Dosimetry monitoring at industrial enterprises, medical institutions and other authorities
- Banknote contamination monitoring



The radiation monitors are microprocessor instruments with digital readout. The G-M tube with the energy compensating filter is used as a detector.



ATOMTEX

INSTRUMENTS AND TECHNOLOGIES FOR
NUCLEAR MEASUREMENTS AND RADIATION MONITORING

Instrument	AT6130	AT6130A	AT6130B AT6130D	AT6130C
Beta radiation flux density	+	-	-	-
X-ray	+	-	-	-
Gamma radiation	+	+	+	+
IR channel for data exchange with PC	+	-	+	-

Specification

Ambient x-ray and gamma radiation dose equivalent rate measuring range

AT6130, AT6130A, AT6130B 0.1 μ Sv/h - 10 mSv/h
 AT6130D 0.1 μ Sv/h - 100 mSv/h
 AT6130C 0.1 μ Sv/h - 1 mSv/h

Ambient x-ray and gamma radiation dose equivalent measuring range

AT6130, AT6130A, AT6130B 0.1 μ Sv - 100 mSv
 AT6130D 0.1 μ Sv - 1 Sv
 AT6130C 0.1 μ Sv - 100 mSv

Beta radiation flux density measuring range

AT6130 10 - 10⁴ particle/(min·cm²)

X-ray and gamma radiation energy range

AT6130 20 keV - 3 MeV
 AT6130A, AT6130B,
 AT6130C, AT6130D 50 keV - 3 MeV

Maximum detecting spectrum beta radiation

energy range - AT6130 155 keV - 3.5 MeV

Intrinsic measurement error $\pm 20\%$

Measurement time of natural background (0.1 μ Sv/h)

at statistical error of $\pm 20\%$ less than 300 s

Energy sensitivity response

at gamma radiation dose rate measuring

respect to ¹³⁷Cs $\pm 30\%$

at beta radiation flux density measuring

respect to ⁹⁰Sr + ⁹⁰Y (-60 \div +50)%

Operating temperature range

AT6130, AT6130B,
 AT6130C, AT6130D -20 \div +55°C
 AT6130A -40 \div +55°C

Relative humidity at 35°C 95%

Protection class

AT6130, AT6130B, AT6130C, AT6130D IP57
 AT6130C IP40

Power requirements: two batteries, type AAA (LR 03) or two accumulators, type AAA, with rated voltage of 1.2 V

Continuous operation time with one battery set at dose rate < 1.0 μ Sv/h

AT6130, AT6130B,
 AT6130C, AT6130D not less than 500 h
 AT6130C not less than 700 h

Radio disturbance characteristics

EN 55022:1998

Electromagnetic compatibility

IEC 61000-4-2:2001
 IEC 61000-4-3:1995

Weight

AT6130, AT6130A,
 AT6130B, AT6130D 0.25 kg
 AT6130C 0.2 kg

Dimensions

AT6130, AT6130A,
 AT6130B, AT6130D 110x60x38 mm
 AT6130C 111x70x28 mm

Complete set: radiation monitor, batteries, holster, Manual, package.

IR reader and applied software, charger with accumulators, head-phones and extension handle are options and they are supplied **on additional order.**

All modifications of the radiation monitor AT6130 have pattern approval certificates of Republic of Belarus and Kazakhstan and modifications AT6130, AT6130A, AT6130B have pattern approval certificates of Russian Federation, Ukraine and Lithuania.

They comply with IEC 60846 and IEC 60325 International standard requirements. They also conform with the 89/336/EEC directive complying with EN 61000-4-3 and EN 61000-4-2 standard requirements.

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