bertin vf nuclear

IONIZING RADIATION METROLOGY

NON-NUCLEAR INDUSTRY

PGI-03

PANORAMIC GAMMA IRRADIATOR

KEY FEATURES

- Irradiator for three gamma radionuclide sources
- Low dose rate at the irradiator surface
- Calibration of multiple dosimeters during a single irradiation cycle
- Fast calibration process, easy operation
- Integrated safety system

DESCRIPTION

The PGI-03 gamma irradiator, fitted with up to three suitable sealed radionuclide sources, is primarily intended for the calibration and testing of personal dosimeters or other small radiation detectors that are placed on a rotary table.

The sources are located in a rotating carousel, which has three nests for sealed radionuclide sources and one parking position, in which all sources are safety shielded.

Optional equipment for the PGI-03 irradiator allows the expansion of its basic functionality. The table with dosimeter holders enables convenient calibration of multiple dosimeters simultaneously. The rotary table eliminates the effect of possible non-homogeneity of the gamma field, thereby increasing calibration accuracy.

The irradiator and its auxiliary technologies are remotely controlled from the connected PC using the DARS software

For non-standard or emergency situations, the irradiator is equipped with a safety system that ensures automatic termination of irradiation.

Source exposure status is indicated by a built-in siren or an external signalling unit.

SPECIFICATION

Total number of nests	4
Number of nests for sources	3
Maximal activity of one source	3TBq (^{137}Cs) 1,5 GBq (^{60}Co)
Maximal total activity	4 TBq (^{137}Cs) 2 GBq (^{60}Co)
The dose equivalent rate at the irradiator surface from a single source with the recommended maximum activity	< 10 µSv/h
Maximum source dimensions (ø × H)	44 x 97 mm
Dimensions irradiator body (ø × H) complete assembly (W x H x D)	 830 x 586 mm 720 x 1615 x 700 mm
Nominal beam axis height	1 500 mm
Power supply	230 V 50 Hz
Shielding thickness	110 mm
Weight irradiator body complete assembly	 600 kg 725 kg
Communication interface	Ethernet

RELATED PRODUCTS

PGI-01	Panoramic Gamma Irradiator for one source
CB-60	Calibration Bench

PGI-03

PANORAMIC GAMMA IRRADIATOR

OPTIONAL FEATURES[1]

The Control System for the Calibration Laboratory DARS
Rotating table for dosimeter calibration
Calibration bench CB-60

[1] *Optional features must be specified before ordering*

The PGI-03 irradiator equipped with a dosimeter rotating table and three CB-60 calibration benches

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