



# IR 2000

TLD Irradiator



Nuclear  
Power



Homeland  
Security  
& Defense



Industrial and  
Manufacturing



Healthcare



Labs and  
Education

## OVERVIEW

The TLD-irradiator model IR-2000 offers a fast automatic way of irradiating Mirion TL-dosimeters. It's suitable for irradiating dosimeter cards and single TL-elements.

The use of the IR-2000 is very convenient when large number of dosimeters needs to be irradiated. As the IR-2000 utilizes the same dosimeter card magazine as RE-2000 reader for processing the TL-cards, the TL-cards can be easily processed in the reader after irradiation.

The use of IR-2000 is strongly recommended for system quality control and calibration including system stability and linearity checking, individual sensitivity coefficient definition and signal to dose

## KEY FEATURES

- irradiation of single TL-elements or TL-dosimeter cards
- programmable delivered dose by repeated irradiations
- irradiation of 500 dosimeter cards per hour with  $^{90}\text{Sr}/^{90}\text{Y}$  source
- used for TLD-system QC and calibration
- standalone use ( no PC needed)
- loading capacity up to 200 cards with optional cassette feeder

Health Physics

## PHYSICAL CHARACTERISTICS

- Speed: 500 four element cards per hour (1 mGy)
- Dose range: 1 to 100 mGy
- Leakage radiation level: < 1 µGy/h at 10 cm distance on the case surface
- Radiation source: <sup>90</sup>Sr/<sup>90</sup>Y, 37 MBq (different activities on request)
- Irradiation programs:
  - equal exposures for successive dosimeters
  - separate individual exposures for successive dosimeters
  - linearly increasing exposures for successive dosimeters
- Capacity: 200 dosimeter cards with optional cassette feeder
- Dose repeatability: < 0.5%
- Control: Menu driven with 16 control keys
- Option: automatic cassette feeder, capacity of 10 cassettes

## ELECTRICAL CHARACTERISTICS

- Power requirements: 100 - 250 VAC 50/60Hz, 150VA at 50Hz

## MECHANICAL CHARACTERISTICS

- Dimensions: (HxWxD) 400 x 570 x 340 mm
- Weight: 28 kg
- Display: LCD dot matrix with backlight

## ENVIRONMENTAL CHARACTERISTICS

- operating temperature: from 0°C to +40 °C
- storage temperature: from -10°C to +60 °C

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