

Personal Alpha Dosimeter (PAD)

DOSMK3- Individual Sampler



Originally developed in 1983, the Radiation Safety Institute of Canada's Personal Alpha Dosimeter has become an indispensable safety tool for the uranium mining industry and companies involved in the clean-up of radioactive waste sites. In fact, our PAD service is the only licensed radiation dosimetry service in North America capable of measuring the actual exposure of individual workers to alpha radiation from radon and thoron progeny and LLRD.

- A reliable, efficient and fully integrated personal radiation exposure monitoring system
- The PAD is lightweight, self-contained and durable – quite simply the most accurate and convenient technology available on the market
- Government certified and licensed by the Canadian Nuclear Safety Commission (CNSC)

Best of all, every aspect of the Institute's PAD system is backed by our world-class scientific and technical staff.

Features

Sampling Flow Rate	4 l/h ± 20%
Operating Time	> 12 hrs
Charging Time	12 hrs
Dimensions	94 x 79 x 63 mm
Weight	300 g
Operating Temperature	-10°C to 45°C

Specifications

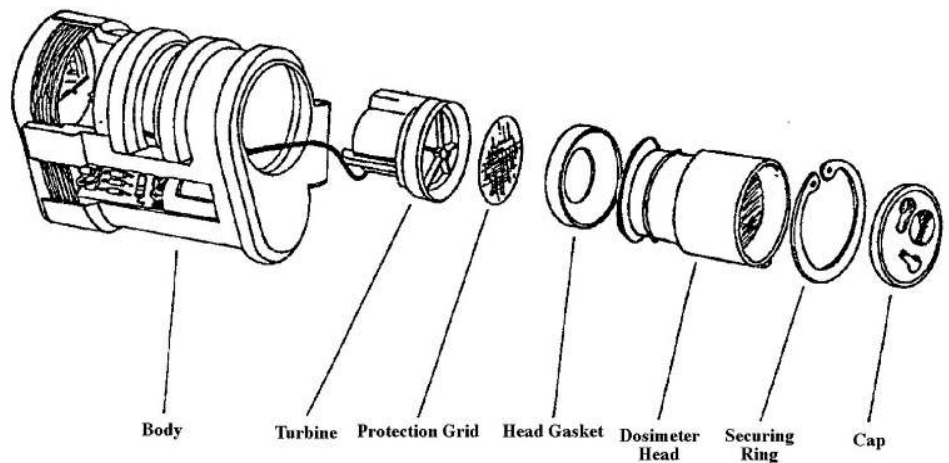
The individual sampler is an air pumping system designed to draw air through the dosimeter head. A battery operated centrifuge pump is enclosed in a durable polycarbonate box designed to be worn on the belt of an individual being monitored.

- Molded Polycarbonate Casing
- Nominal Flow rate of 4 l/h (non-regulated)
- Battery powered: 1.2V; 1.5 A·h NiCd battery
- Charged by induction, no metallic contacts necessary



Part Numbers

Product ID	Description
CAIRS	RSIC Dosimeter Head
JOITR	Head Gasket
COUV	End-Cap dust cover
CLIPS	Securing ring



Radiation Safety Institute of Canada

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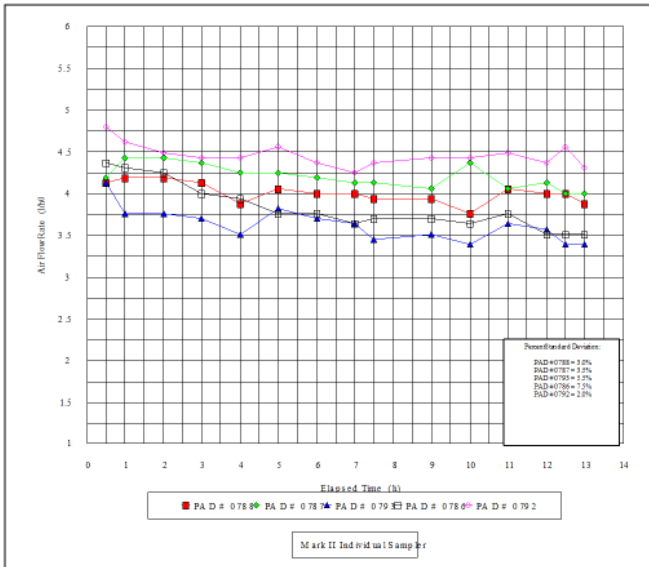
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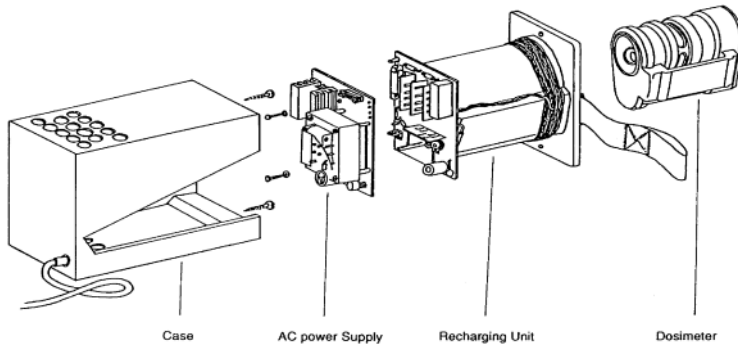
PAD Airflow Stability Data



The individual sampler (when loaded with a dosimeter head) is designed to generate a nominal air flow rate of 4 l/h \pm 20%. Even though the individual sample air flow is not regulated, the air flow rate remains constant to within 20% during the operating period.



DOSMK3 Charging System



- The charger includes an electronic card which generates a high frequency AC current which feeds a coil.
- Frequency is tuned by means of an external charge controller placed into the cell.
- A magnetically operated switch gates the power supply to the electronic card when the sampler is placed in the cell.
- Protection of each charging unit is provided by a 0.5 A fuse, with blown fuse indication by a means of a light-emitting diode.

The chargers are available in units of 5, 10, or 25 depending on the dosimetry requirements.

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Product ID	Description
ARM25	25x Charging Cabinet
ARM10	10x Charging Cabinet
ARM05	5x Charging Cabinet
CONCH	Charge Controller