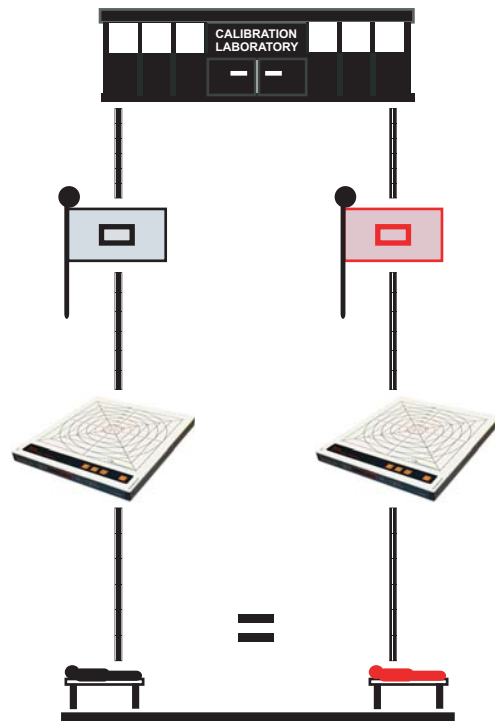


Unique Solution

Achieve consistent patient dose levels locally, nationally and internationally.

- The PDC solves much publicized problems relating to variation of DAP, Patient Dose system and AEC calibration.
- Measures DAP, DAP rate, Dose and Doserate.
- Ideally suited to aid the setting of reference doses.
- Widespread use of the PDC by equipment manufacturers, service organizations, physicists and radiation technologists will help achieve consistent patient dose levels.
- Ion chamber performance with automatic temperature and pressure correction.



- A simple to use self-contained instrument with optional computer control via USB.
- Incorporates optical and radiographic alignment markers.
- Testing up to 30 x 30 cm field size.

Technical Data

Ionization chamber

Response versus radiation quality $\pm 3\%$
(50 kV ... 150 kV, norm. to 100 kV; acc. IEC 60580)

Quality equivalent filtration (70kV) 0.6 mm Al
Active area
Dose area product max. (300 x 300) mm²
Air kerma min. (100 x 100) mm²

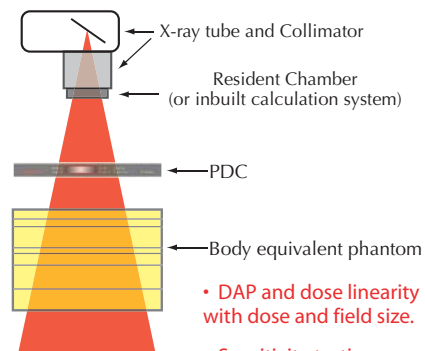
Measuring system

Digital resolution
Dose area product 0.01 $\mu\text{Gy}\cdot\text{m}^2$
Dose area product rate 1 $\mu\text{Gy}\cdot\text{m}^2/\text{min}$
Air kerma 0.001 mGy
Air kerma rate 0.1 mGy/min

Technical Data and Applications

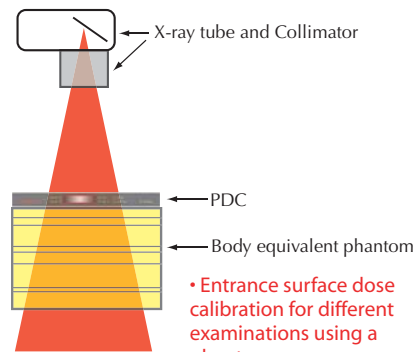
Display range	
Dose area product	(0.01... 99 999 999) $\mu\text{Gy}\cdot\text{m}^2$
Air kerma	(0.001... 99 999 999) mGy
Rated range of use	
Tube voltage	(40 ... 150) kV
Dose area product:	
(low rate range)	(1... 1·10 ⁴) $\mu\text{Gy}\cdot\text{m}^2/\text{min}$
(high rate range)	(2·10 ³ ... 9·10 ⁵) $\mu\text{Gy}\cdot\text{m}^2/\text{min}$
Air kerma rate	(0.2 ... 9·10 ³) mGy/min (at the position of the chamber)
Atmosphere pressure	(80.0 ... 106.0) kPa
Temperature	(+10 ... +40) °C
Air humidity	(10 ... 80) % rel. humidity (max. 20 g/m ³)
Power supply	
Internal rechargeable battery pack	Li-ION, 2 cells
number of charge/discharge cycles	> 500
operation time (state of charge: 100%)	> 8 h
Serial Interface	
Protection class (acc. IEC 60529)	IP 41
Weight	2.32 kg
Dimension	350 mm x 410 mm x 35 mm (length x width x height)

Dose / DAP Air Kerma Calibration



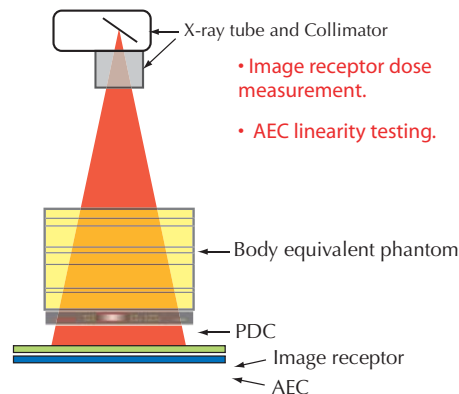
- DAP and dose linearity with dose and field size.
- Sensitivity testing.
- DAP and dose calibration at the patient plane or at a reference distance.

Entrance (skin) Dose / DAP Calibration and QA



- Entrance surface dose calibration for different examinations using a phantom.
- Establishing examination related reference DAP and dose levels.

Image receptor Dose / DAP Calibration and QA



- Image receptor dose measurement.
- AEC linearity testing.