Features

- Suitable for universal dosimetry in radiation therapy, diagnostic radiology and health physics.
- Complies with the standards:
  - IEC 60731 as a reference class dosemeter,
  - IPEM guidelines on dosimetry transfer instruments as a secondary standard dosemeter,
  - IEC 60601-2-9 as a dosemeter for patient contact,
  - IEC 61674 as a diagnostic dosemeter.
- High accuracy, excellent resolution (1 fA) and wide dynamic measuring ranges.
- HV power supply (0 ... ±400)V in increments of ±50V.
- Measures integrated dose (or charge) and dose rate (or current) simultaneously.

UNIDOS is well known and accepted worldwide as the dosemeter of choice with best performance available on the market. Thousands of international users enjoy the high quality, the reliability and the excellent adaptation of this unique dosemeter. UNIDOS is a high precision secondary standard reference class dosemeter. A comprehensive chamber library makes it possible to store calibration data of up to 30 chambers. Air density corrections are done by keying in air pressure and temperature, or by means of radioactive check devices. The check device data are stored in a database. An internal clock calculates the decay of the isotope radioactivity. The device includes automatic leakage compensation, an automatic built-in system test and an RS232 interface. It features both mains and battery operation. The delivery includes a manual in English.

Ordering Information

T10005 UNIDOS, connecting system BNT, 115/230 V
T10002 UNIDOS, connection system TNC, 115/230 V
T10001 UNIDOS, connection system M, 115/230 V

Options

S100002 UniSet Software for computer communication
L522021 UNIDOS Carrying case

Specification

- Type of product: High precision dosemeter according to IEC 60731 and IEC 61674.
- Application: Dose and dose rate measurements (charge and current measurements) in radiation therapy, X-ray diagnostics and radiation protection.
- Measuring quantities and units:
  - Absorbed dose to water (Gy)
  - Absorbed dose to air (Gy)
  - Air Kerma (Gy)
  - Photon equivalent dose (Sv)
  - Exposure (R)
  - Dose length product (Gy·cm)
  - The corresponding dose rates
  - Charge (C)
  - Current (A)

- Measuring ranges:
  - Charge: 2 pC ... 65 mC
  - Current: 200 fA ... 1 µA

- Resolution:
  - Charge: 10 fC
  - Current: 1 fA

- Long-term stability: < ± 0.1 % p.a.

- Non-linearity: < ± 0.5 % according to IEC.

- Accuracy of the C and A measurement: < ± 0.5 % ± 1 digit.

- Interval time: (6 ... 9999) s

- Temperature range: (10 ... 40) °C, (50 ... 104) °F

- Relative humidity: (10 ... 85) %, max 20 g/m³

- Leakage current: < ± 1 fA

- Amplifier zeroing: automatically within approx. 75 s

- Chamber voltage: (0 ... ± 400) V in 50 V increments

- Interface: RS232

- Power supply: 115/230 VAC, (50 ... 60) Hz resp. rechargeable NiCd batteries

- Dimensions: (H x W x D) 152 mm x 257 mm x 262 mm

- Weight: approx. 6.4 kg, 14.11 lbs