



# UNIDOS<sup>webline</sup> Universal Dosemeter

*High performance secondary standard and reference class dosimeter / electrometer with integrated network features*

## Features

- ▶ High quality reference class dosimeter for radiation therapy, diagnostic radiology and radiation protection
- ▶ Integration in a LAN with the internet standard TCP/IP
- ▶ Remote access functionality
- ▶ E-mail capability, eg. to initiate self tests and to send a status report
- ▶ Active, configurable TFT display with wide viewing angles
- ▶ Easy and fast menu-driven handling with navigation knob and help system

UNIDOS is well known and accepted worldwide as the dosimeter of choice with best performance available on the market. The new UNIDOS<sup>webline</sup> sets another milestone in dosimetry. It is a high precision secondary standard reference class dosimeter combined with modern network features.

The ethernet interface based on the TCP/IP protocol allows to integrate the UNIDOS<sup>webline</sup> in a LAN for remote access and E-mail capability. Its big, user-configurable TFT display guarantees visibility from wide angles. A comprehensive chamber library makes it possible to store the calibration data of the 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. It features both mains and battery operation. The delivery includes a manual in English.

## Ordering Information

T10023 UNIDOS<sup>webline</sup>, connecting system BNT,  
T10022 UNIDOS<sup>webline</sup>, connection system TNC  
T10021 UNIDOS<sup>webline</sup>, connection system M  
L522021 UNIDOS Carrying case

<sup>1</sup>IEC 60731: "Medical electrical equipment - Dosimeters with ionization chambers as used in radiotherapy"

<sup>2</sup>IEC 61674: "Medical electrical equipment - Dosimeters with ionization chambers and/or semi-conductor detectors as used in X-ray diagnostic imaging"

<sup>3</sup>IEC 60846: "Radiation protection instrumentation - Ambient and/or directional dose equivalent (rate) meters and/or monitors for beta, X and gamma radiation"

## Specification

- ▶ Type of product High precision dosimeter according to IEC 60731<sup>1</sup>, IEC 61674<sup>2</sup> and IEC 60846<sup>3</sup>
- ▶ 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)  
Air Kerma (Gy)  
Photon equivalent dose (Sv)  
Ambient dose equivalent H\*(10)  
Exposure (R)  
Dose length product (Gy·cm)  
Activity (Bq), (Ci)  
Corresponding rates of above  
Charge (C)  
Current (A)
- ▶ Measuring ranges:
 

Charge	2 pC ... 8.991 C
Current	200 fA ... 2.5 μA
- ▶ Resolution:
 

Charge	10 fC
Current	1 fA
- ▶ Long-term stability < ± 0.1 % p.a.
- ▶ Non-linearity < ± 0.25 % according to IEC
- ▶ Interval time (1 ... 9999) s
- ▶ Temperature range (10 ... 40) °C, (50 ... 104) °F
- ▶ Relative humidity (20 ... 80) %, max 20 g/m<sup>3</sup> range
- ▶ Leakage current < ± 1 fA
- ▶ Amplifier zeroing automatically within approx. 75 s
- ▶ Chamber voltage (0 ... ± 400) V in 1 V increments
- ▶ Interfaces IEEE802 (TCP/IP), RS232
- ▶ Power supply (85 ... 265) VAC, (50 ... 60) Hz resp. rechargeable batteries AA (NiMH)
- ▶ Dimensions 152 mm x 257 mm x 262 mm  
(H x W x D) 5.98 in x 10.12 in x 10.31 in
- ▶ Weight approx. 5.9 kg, 13.0 lbs