Redefining the standard of dosemeters –
easy to use and compatible with networks

UNIDOS webline
High quality Reference Class Dosemeter
for radiation therapy, diagnostic radiology
and health physics.
Set your UNIDOS® webline tailored to meet your requirements. Menu-prompting with navigation knob and help system makes this easy for you. All measuring functions are triggered by pushbuttons.

All important data is available at a glance. The large TFT display shows all required information in a clearly structured fashion, and it is visible even at a distance or from wide viewing angles.
Integrate your UNIDOS\textsuperscript{webline} into your LAN to control the measurement equipment remotely from every PC in the network or to send status reports via e-mail.

Rely on the standard of dosemeters accepted worldwide. UNIDOS\textsuperscript{webline} surpasses most requirements by far for reference class dosemeters according to IEC 60731 and the IPEM secondary standard dosemeter guidelines.
The UNIDOS is well known and accepted world-wide as the dosemeter of choice with the best performance available on the market. The new UNIDOSwebline sets another milestone in dosimetry. It is a high-precision, secondary standard reference class dosemeter combined with modern network features. The Ethernet interface based on the TCP/IP protocol makes it possible to integrate the UNIDOSwebline in a LAN for remote access and e-mail capability. Its large, user-configurable color TFT display guarantees visibility from wide angles. Chamber data are stored in a comprehensive chamber library. Air density is corrected 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 isotope radioactivity decay.

**Technical Overview**

- **Resolution:** 1 fA
- **Measuring range:** 200 fA ... 2.5 µA

Complete detector information for more than 50 detectors, stored in the database.

- Air density correction method \( t \) & \( p \) or \( k_p \) & \( k_m \). Different correction factors can be entered for every detector.

- Navigation knob for fast, convenient handling.

- Configurable TFT display. Shows dose and dose rate simultaneously or only one of both values. Radiological units: Gy, Gy/min, Sv, Sv/h, H*(10), R, R/min, Gy · cm, Bq, Ci or electrical units: A, C.

- Bar graph for dose rate display.

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Redefining the standard of dosemeters:

- **Ease of use**
  - Active, configurable TFT display.
  - Large measuring display easily visible from great distances and wide viewing angles.
  - Easy and fast menu-driven handling with navigation knob and help texts.

- **Network compatibility**
  - Integration in a LAN with the internet standard TCP/IP.
  - Operation, measuring data acquisition and communication from every VNC client in the network via TCP/IP interface.
  - Extensive self-test routines with the possibility to e-mail status reports.

- **Classification**
  - Highest classification in all applications (radiation therapy, diagnostic radiology, health physics).
  - Surpasses the requirements for reference class dosemeters according to IEC 60731, the IPEM secondary standard dosemeter guidelines, IEC 61674 for diagnostic radiology and IEC 60846 for health physics.

**Measuring ranges:**
- **Charge**: 2 pC ... 9 C
- **Current**: 200 fA ... 2.5 µA
- **Resolution**:
  - **Charge**: 10 fC
  - **Current**: 1 fA
- **Long-term stability**: < ± 0.5 % p.a.
- **Non-linearity**: < ± 0.5 % according to IEC
- **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**
  - Both mains and battery operation (85 ... 265) VAC, (50 ... 60) Hz resp.
  - rechargeable batteries AA (NiMH)
- **Dimensions**
  - (H x W x D): 152 mm x 257 mm x 262 mm
- **Weight**: Approx. 5.8 kg, 12.8 lbs

**Comprehensive statistic and data logging function with 3 operation modes (manual, signal-controlled or time controlled).**
Up to 100 measuring values are stored in a list. The data can be reviewed and exported. Mean value and relative standard deviation are displayed on the measuring screen.

**Radiation Therapy**
- Easy to use menu-prompting system with help texts. Important settings can be password protected (different levels).
- Language selectable

**Diagnostic Radiology**
- Detector signal input. Connector types: BNT, TNC or M.
- High voltage adjustable up to ± 400 V in increments of 1 V

**Health Physics**
- Rechargeable batteries with built-in charging station
- External high voltage input for chamber voltage > 400 V
- Trip output
- Ethernet Interface (TCP/IP)
- RS232 for serial data communication

**Detector signal input. Connector types: BNT, TNC or M.**

- High voltage adjustable up to ± 400 V in increments of 1 V

.. image:: Ports.png
   :alt: Ports diagram
Versatile dosemeters

PTW Therapy Dosemeters and Electrometers

- High quality reference class dosemeter for radiation therapy, diagnostic radiology and health physics
- Integration in a LAN with the Internet standard TCP/IP
- Remote access function
- Active, configurable TFT display with wide viewing angles
- Navigation knob for fast and comfortable handling

UNIDOS
- High quality reference class dosemeter for radiation therapy, diagnostic radiology and health physics
- Suitable for use in patient environments
- Simultaneous measurement of dose and dose rate

UNIDOS E
- High quality reference class dosemeter for radiation therapy, diagnostic radiology and health physics
- Easy to use
- Simultaneous measurement of dose and dose rate
TANDEM
- Fast field class dual channel electrometer for radiation therapy and for TBA systems
- Absolute dose measurement with TanSoft software
- Resolution 10 fA, time constant 10 ms

MULTIDOS
- Field class multi channel dosemeter for radiation therapy
- Suitable for use in patient environments
- Multiple applications (absolute dosimetry, quality control, in-vivo dosimetry)

VIVODOS
- Multi channel dosemeter for in-vivo dosimetry
- For use in patient environments
- Connects up to twelve semiconductor detectors

VIVODOS E
- Multi channel dosemeter for in-vivo dosimetry
- For use in patient environments
- Connects up to 4 semiconductor detectors

OPTIDOS
- Brachytherapy dosemeter with scintillation detector
- For quality control in intravascular brachytherapy and for dosimetry of ophthalmic radiation sources
- Small water equivalent plastic scintillation detector

UNIDOS atto
- Highly sensitive electrometer
- For calibration laboratories and research (not a medical device)
- Resolution 0.01 fA

Dosemeter Accessories
- Radiation detectors
- Connection cables
- Radioactive check devices
- Electrical check device UNITEST
- Carrying cases
- Water, water equivalent and acrylic phantoms