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**RPD is an
authorized distributor**

RPD Product Information

Item Number Description

321-021-10	PTW Unidos E Electrometer/Dosemeter - BNC-F Connector
321-021-9	PTW Unidos E Dosemeter- TNC F/M Connector

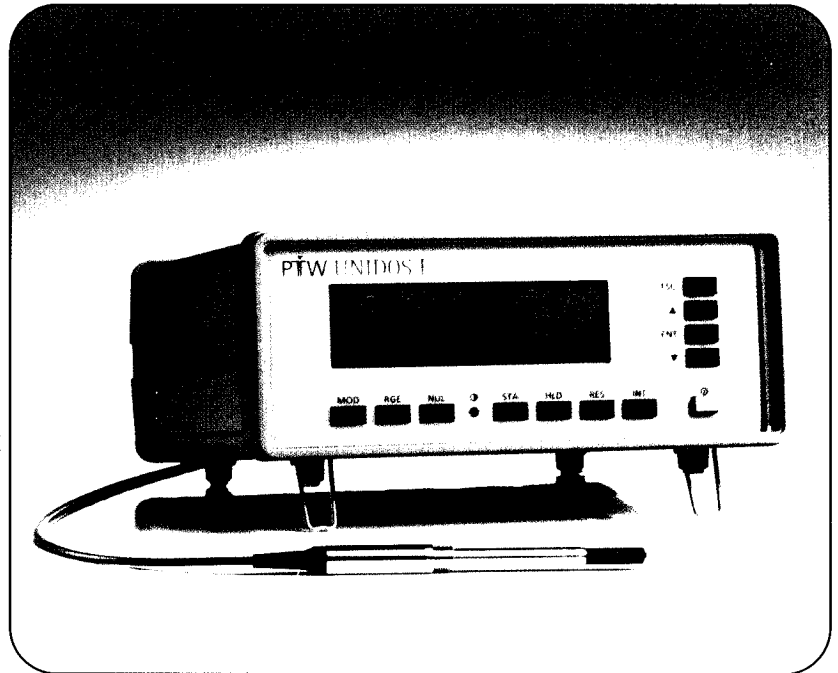
UNIDOS™ E

Diagnostic Radiology
Radiation Therapy
Radiation Protection

High Precision Electrometer/Dosemeter
type T10008, T10009, and T10010

UNIDOS E

UNIDOS E is a high precision field class electrometer, which is ideally suited for daily measurement in diagnostic radiology and radiation therapy. UNIDOS E meets or exceeds all of the requirements for field class dosimeters according to IEC 60731, and IEC 61674, and can be easily used with a wide variety of ionization chambers or solid state detectors. UNIDOS E is light weight, compact, portable, and powered by 115/230 VAC or its rechargeable NiCd accumulators.



Features:

- High precision field class electrometer for daily measurements in:
 - Radiology
 - Radiation Therapy
 - Mammography
 - Fluoroscopy
 - CT
- Can be used with a wide variety of ion chambers or solid state detectors
- Measures dose, dose rate, charge, and current
- Reading in R, Gy, R/min, Gy/min, or C, A
- Chamber library for storage of:
 - chamber type
 - serial number
 - calibration factor
 - measuring units
 - chamber voltage
- Air density and other correction factors available
- Polarization voltage and polarity adjustable from 0 V to ± 400 V in 50 V increments
- RS232 interface

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UNIDOS™ E

High Precision Electrometer/Dosemeter type T10008, T10009, and T10010

Technical Data

Type of instrument	Field class dosimeter according to IEC 60731 and IEC 61674
Application	Dose, dose rate, charge, current measurements in diagnostic radiology and radiation therapy
Measuring quantities and units	Absorbed dose to water, air kerma in Gy Absorbed dose rate to water, air kerma rate in Gy/min Exposure in R Exposure rate in R/min Dose-length product in Gy • cm Charge in C Current in A
Resolution for current measurements	$1 \cdot 10^{-11}$ A
Resolution for charge measurements	$1 \cdot 10^{-14}$ C
Measuring range for current measurements	$(2 \cdot 10^{-11} \dots 1 \cdot 10^{-9})$ A
Measuring range for charge measurements	$(2 \cdot 10^{-14} \dots 6.5 \cdot 10^{-11})$ C
Measuring range with 0.5 % resolution (with Farmer ionization chamber type 30001)	Dose rate: 0.6 mGy/min ... 3000 Gy/min Dose: 0.1 mGy ... 3.0 MGy
Long-term stability	$< \pm 0.5$ % according to IEC
Non-linearity	$< \pm 0.5$ % acc. to IEC for dose measurements $< \pm 1.0$ % acc. to IEC for dose rate measurements
Internal adjustment time	< 1.5 s
Accuracy of current and charge measurement	$< \pm (0.5 \text{ \%} \pm 1 \text{ count})$
Interval time	$(1 \dots 9999)$ s
Nominal useful range	
Temperature	$(10 \dots 40)$ °C
Air pressure	$(700 \dots 1060)$ mbar
Humidity	$(10 \dots 75)$ % rel. humidity; 20 g/m ³ max.
Leakage current (zero drift)	$< \pm 10^{-11}$ A
Zeroing of the amplifier	automatically in approximately 50 s
Warming-up period	15 min
Chamber voltage	$(0 \dots \pm 400)$ V in 50 V-increments
Power supply	mains power (90 ... 240) V; (50 ... 60) Hz or from rechargeable NiCd batteries, (operating time: (3 ... 4) h)
Time constant for current and dose rate measurements	Low: 350 ms, Medium: 200 ms, High: 200 ms
Connection Systems	BNT, TNC, or M
Weight	approximately 6.6 pounds (3 kg)
Outer dimensions	100 mm x 250 mm x 160 mm (H x W x D) 3.9 in x 9.8 in x 6.3 in (H x W x D)

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