

QUART didoEASY M / R / MR

# Precision Meters for Dose, Dose Rate and Time







## QUART didoEASY Series

Easy-to-Use Precision Dosemeters

The QUART didoEASY meters can be used for simple but very precise dose measurements. Since the meters do NOT require any pre-setting procedure, measurement results are acquired very quickly:

- 1. Position the detector and switch on the didoEASY meter...
- 2. Set the x-ray equipment to the desired parameters...
- 3. Expose...
  - and simply read the TRUE DOSE value from the meter's display.

The QUART didoEASY meters automatically compensate ALL beam qualities! NO further corrections or compensations are required.

Like the QUART dido2000 series meters, the detector of the QUART didoEASY meter series also measures the integrated dose-width product (DWP) at dental panoramic equipment. \* A feature that provides real added value for QUART users.

\* REFERENCE: S A Mitchell and C J Martin, Comparison of ionisation chamber and semiconductor detector devices for measurement of the dose–width product for panoramic dental units, J. Radiol. Prot. 33 321 (2013).

#### **Technical Specifications**

Temp. Range  $15 - 35^{\circ}$ C Storage Range  $-10 - 65^{\circ}$ C Humidity  $20-75\% / 20g/m^3$ 

Weight Base Unit: 280g including Battery

Detector: negligible

Size Base Unit 170x70x45mm (LxWxH)

Detector 5.0 x 1.6 x 0.4 cm (L x W x H)

Unit Displayed Gy or R (to be specified on order)

Date and Time on Display

### QUART didoEASY R

Dose  $0.2 \mu Gy - 999 Gy$ 

Uncertainty: +/- 5 %

Dynamic Range: 45 - 160 kV

Auto-Compensation for all R+F radiation qualities Attenuated and open radiation beam measurements

DWP\* 0.2 μGy\*cm - 999 Gy\*cm

Uncertainty: +/- 5 %
Dynamic Range: 50 - 150 kV
Auto-Compensation for all radiation qualities
Attenuated and open radiation beam measurtements

Exposure Time 0.5 ms - 300 s

Mode: Time for full exposure Uncertainty:  $\pm 0.5$  ms or 0.1 %

Dose Rate  $0.25 \mu Gy/s - 999 mGy/s$ 

Mode: Average rate per exposure

Uncertainty: ± 5 %







# QUART didoEASY Series

Easy-to-Use Precision Dosemeters

The QUART didoEASY M is designed for precision measurement in mammography x-ray QA/QC. Dose and exposure time are measured for all mammography applications at equipment using digital or screen-film image acquisition technology.

The technical approach of the didoEASY M enables automatic compensation for ALL mammography radiation qualities currently in use: Mo/Mo, Mo/Rh, Mo/Al, Rh/Rh, Rh/Al, W/Rh, W/Al, W/Ag - with or without compression paddle in the beam.

### QUART didoEASY M

Dose 0.2 μGy - 999 Gy

Uncertainty: +/- 5% Dynamic Range: 25 - 40 kV

Auto-Compensation for all Mammography radiation qualities

Attenuated and open radiation beam measurements

Radiation Qualities: Mo/Mo, Mo/Rh, Mo/Al, Rh/Rh, Rh/Al,

W/Rh, W/Al, W/Ag

Exposure Time 0.5 ms - 300 s

 $\begin{tabular}{ll} Mode: & Time for full exposure \\ Uncertainty: & $\pm 0.5$ ms or 0.1 \% \\ \end{tabular}$ 

Dose Rate 0.25 μGy/s – 999 mGy/s

Mode: Average rate per exposure

Uncertainty: ± 5 %

#### **OUART didoEASY MR**

Dose 0.2 μGy - 999 Gy

Uncertainty: +/- 5% Dynamic Range: 25 - 160 kV

Auto-Compensation for all Dental, R+F (see QUART didoEASY R) and Mammography radiation qualities (see QUART didoEASY M)

Attenuated and open radiation beam measurements

Exposure Time 0.5 ms - 300 s

Mode: Time for full exposure Uncertainty: ± 0.5 ms or 0.1 %

Dose Rate  $0.25 \mu Gy/s - 999 mGy/s$ 

Mode: Average rate per exposure

Uncertainty:  $\pm 5 \%$ 

Included in the Delivery

✓ QUART didoEASY Dosemeter

✓ Calibration Certificate

✓ Manual

✓ Transport Case













www.quart.de

