

QUART DIDO Series

DIDO2000K*

Range of Application

- ▶ Digital & Conventional
- ▶ Radiography
- ▶ (Pulsed) Fluoroscopy
- ▶ Dental Intra-Oral
- ▶ Dental OPG
- ▶ Dental CEPH
- ▶ Dental 3D (DVT)
- ▶ Scanning Fan-Beam Systems
- ▶ Needle Beam X-Ray Systems



DIDO2100K*

Range of Application

- ▶ Same as DIDO2000K
- ▶ Plus Mammography
- ▶ Plus Specimen Radiography
- ▶ Plus Local Dose Monitoring



* Units that carry the "K" in their name feature the kV functionality – units without it do not.

• Compact Design Concept

The DIDO series diagnostic dosimeters are multifunctional Quality Assurance platforms. Strictly following our own Compact Design Concept, they feature optimised size and design plus a compact multi functional state-of-the-art detector.

Downsize-detector design facilitates measurements where only limited space for a proper detector positioning is available. Hence, measurements behind the scatter radiation grid of a radiography unit can be done with the DIDO without any limitations. And, no influence whatsoever is exerted on the automated exposure control (AEC) of x-ray units.

• Genuine Features

Despite their unpretentious appearance, the DIDO dosimeters are technically sophisticated and unmatched in performance in their class.

A great deal of unique features such as the verification of inherent tube potential, the display of both exposure and imaging time, or the dose-width product measurement, make them one of the most compact, multipurpose QA systems available.

• All in One

DIDO diagnostic dosimeters cover almost any field of x-ray application. No matter if conventional or digital modality, the meters can be used for measurements in Radiography,

(Pulsed) Fluoroscopy, DSA, Dental, 3D (DVT), and Mammography.

Although the kV feature is part of the "standard" configuration of each DIDO, the dosimeter can also be acquired without it. All other functions will be the same. The cost of a meter without kV feature will be lower – the price performance ratio, however, remains excellent.

• Maximum Accuracy

All our meters carry the German PTB type approval. They are calibrated to traceable national standards. A calibration certificate provided with a dosimeter is valid for two years after which the calibration in most cases has altered imperceptibly, if at all.

• Fast and Reliable

The DIDO series diagnostic dosimeters collect all data simultaneously in only one exposure. Except for a very short setup procedure, almost no further user interaction is required.

The DIDO dosimeters fully analyse each exposure and display all measured parameters after radiation ended. Measurement data can easily be queried via the 3-button panel on top. All data is automatically compensated and corrected before being displayed.

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QUART DIDO Series Diagnostic Dosimeters (continued)

Specifications

Basics

Base Size	16.1 x 7.0 x 4.4 cm (L x W x H)
Base Weight	235 g (including Battery)
Display	4 Digits plus Clear Text
Detector Size	5.0 x 1.6 x 0.4 cm (L x W x H)
Detector Weight	Negligible
Detector Cable	2 m
Power Supply	9 V Alkaline Battery
Power Consumption	Below 7 mA
Battery Life	Approximately 2 years
Auto-Off	After 10 minutes

Measurement

Single Exposure Method
Only 2 Setup Configurations needed
Full Range Auto-Compensation for Dose

Measurement Start	Auto
Measurement Stop	Auto
Intermediate Reset	Auto
Calculation Process	2 s

Data Communication

USB 1.1 Interface (2.0 compatible)
Data Read-Out available as optional feature

Time

Range	0.5 ms – 40 s (or 20 s optional)
Resolution	0.1 ms
Trigger Level	0.1 nGy/s
Uncertainty	< 0.5 % (+/- 0.5 ms)
Time Modes	Exposure Time (Full Exposure) Imaging Time (Radiation above 50% Dose Rate Level [Compliant with IEC 60601-2-54])

Dose

Exposure Conditions	Attenuated and Open Beam (Pre-Configuration required)
Range	5 nGy – 999 Gy
Resolution	0.01 nGy
Minimum Exposure Conditions	
DIDO2000K	0.6 mA / 40 kV / 25 mm Al / 90 cm
Minimum Exposure Conditions	
DIDO2100K	0.3 mA / 22 kV / no filtration / 80 cm
Uncertainty	< 5 %

Dose Rate

Range	0.1 µGy/s – 1.0 Gy/s
Resolution	0.1 nGy/s
Trigger Level DIDO2000K	250 nGy/s
Trigger Level DIDO2100K	100 nGy/s
Uncertainty	< 5 %
Dose Rate Modes	Real-Time Display Period Dose Rate (Half-exposure) Maximum Dose Rate

kV

Exposure Conditions	2.5 mm Al for open beams (Verification of inherent tube filtration) 0.8 mm Cu Added Filtration (DIDO kV filter) or 25 mm Al Added Filtration (Pre-Configuration required)
Range DIDO2000K	40 – 150 kV
Range DIDO2100K	22 – 35 kV / 40 – 150 kV
Resolution	0.1 kV
Minimum Exposure Conditions	
DIDO2000K	0.6 mA / 40 kV / 25 mm Al / 90 cm
Minimum Exposure Conditions	
DIDO2100K	0.6 mA / 40 kV / 25 mm Al / 90 cm 5.0 mA / 22 kV / no filtration / 80 cm (Mammo)
Uncertainty	< 5 %
kV Mode	kVp / effective kV

Pulses

Range	1 – 65,000
Resolution	Single Pulse
Trigger Level DIDO2000K	250 nGy/s
Trigger Level DIDO2100K	100 nGy/s
Uncertainty	+/- 1 Pulse