



CONNY II QC Dosemeter

X-ray dosemeter for constancy tests of X-ray installations for radiography, fluoroscopy and mammography

Features

- ▶ Represents a valuable small size dosemeter for routine QC
- ▶ Measures the entrance dose and dose rate in front of a phantom at 30 kV (Mammo) and 70/100 kV (conventional X-rays)
- ▶ Complies with IEC 61674* within the ranges of use
- ▶ Displays the measuring units Gy, Gy/s, (R and R/s optionally) and time in s

The dose of X-ray beams is the most important parameter to check the consistent performance of X-ray equipment. Each constancy test should include a dose measurement. The CONNY II dosemeter is especially designed for this purpose. It can be used in combination with the REX phantom or with the phantoms of our NORMI and X-CHECK product lines. CONNY II is calibrated in air kerma, and the measuring results are represented on a high contrast digital display. For easy reading the unit can be tilted by collapsible legs.

The battery operated device features auto-start, auto-reset, auto-shutoff and timer functions. It is operated by four push buttons (kV, RANGE, MODE and ON/OFF) and indicates if the battery voltage is too low. The measuring probe includes a calibrated semiconductor detector and can easily be placed on a REX, NORMI or X-CHECK phantom.

During the measurement the display shows the selected measuring quantity. After the measurement has been completed, the display can be switched between dose, mean dose rate and irradiation time.

Ordering Information

T11007 CONNY II Dosemeter, battery operated including manual in English

*IEC 60580: "Medical electrical equipment - Dosemeters with ionization chambers and/or semi-conductor detectors as used in X-ray diagnostic imaging"

Specification

- ▶ Type of product CONNY II X-ray dosemeter for constancy tests
- ▶ Application Dose and dose rate measurement for constancy tests of X-ray installations for radiography, fluoroscopy and mammography according to IEC 61674* within the specified energy ranges
- ▶ Measuring quantities and units Air kerma (Gy)
Air kerma rate (Gy/s)
Irradiation time (s)
- ▶ Measuring ranges and resolution **see back of this page**
- ▶ Ranges of use W-Anode 2.5 mm Al
(50 ... 90) kV
Mo-Anode 30 µm Mo
(25 ... 35) kV
- ▶ Zero drift ≤ 2 digits
zero point will be measured and compensated after switching on
- ▶ Reproducibility ≤ 1 %
- ▶ Energy dependence ± 5 %
- ▶ Linearity of dose measurement ± 2 %
- ▶ Long-term stability max. 2 % per year
- ▶ Dose rate dependence ± 2 %
- ▶ Temperature range (10 ... 40) °C
(50 ... 104) °F
- ▶ Relative humidity range 10 % ... 80 %, max. 20 g/m³
- ▶ Air pressure range (700 ... 1060) hPa
- ▶ Power supply 4 alkaline batteries (AA) 1.5 V
- ▶ Dimensions (H x W x D) 180 mm x 100 mm x 45 mm
7.1 in x 3.9 in x 1.8 in
- ▶ Weight approx. 500 g, 1.1 lbs including batteries

CONNYS II QC Dosemeter

► **Measuring ranges and resolution**

70/100 kV	Range LOW	Range HIGH
Dose		
Range:	2 µGy ... 9.999 Gy	200 µGy ... 9.999 Gy
Resolution:	20 nGy	2 µGy
Dose rate		
Range:	5 µGy/s ... 3 mGy/s	500 µGy/s ... 300 mGy/s
Resolution:	50 nGy/s	5 µGy/s
Irradiation time		
Range:	1 s ... 999.9 s	1 s ... 999.9 s
Resolution:	10 ms	10 ms

30 kV	Range LOW	Range HIGH
Dose		
Range:	5 µGy ... 9.999 Gy	500 µGy ... 9.999 Gy
Resolution:	50 nGy	5 µGy
Dose rate		
Range:	10 µGy/s ... 5 mGy/s	1 mGy/s ... 500 mGy/s
Resolution:	100 nGy/s	10 µGy/s
Irradiation time		
Range:	1 s ... 999.9 s	1 s ... 999.9 s
Resolution:	10 ms	10 ms