

DARKLIGHT SENSITOMETER & DENSITOMETER



Sensitometer and Densitometer

Combined in one device for quality assurance of X-Ray film processing according to International Standard IEC 61223-2-1 and German Standard DIN 6868-2

- Measurement of any grey steps up to $D = 4.5$
- Integrated operator's guidance
- Definition of reference values are supported
- Multi-lingual
- Suitably for all film sizes

DARKLIGHT SENSITOMETER & DENSITOMETER

Quality assurance of X-Ray film processing

General Description

The DARKLIGHT family fulfils all requirements of the International Standard IEC 61223-2-1 and German Standard 6868-2 for the daily constancy test and helps the user by an uniform operator's guidance to carry out the check. The combination of Sensitometer and Densitometer in one housing gives you some advantages like just one power supply (batteries or rechargeable batteries) only, less maintenance and less required space. Of course single Sensitometers and Densitometers are also available.

Intensive ergonomic studies have led to an extraordinary design of the DARKLIGHT family. The big supporting area allows processing X-Ray films of any size.

The Sensitometer is suitable for blue and green X-Ray films. The exposition for blue and green films is manually adjustable in 5 steps. The step wedge with 21 steps has an optical step wedge constant of 0.15. The exposition homogeneity of each step is almost constant. The maximum tolerance is $\pm 0.01 \log(H)$.

The Densitometer permits measurements of single grey steps up to a density value of 4.5. The grey step to be measured is placed beneath a measuring orifice. Pressing the "Lamp" key releases the measurement. The optical densities are measured with a repeat accuracy ΔD of ± 0.01 .

General Data

Sensitometer

- Specification: According to IEC 61223-2-1
- Exposure color: Selectable blue or green
- Peak wavelength: Blue (460 ± 10) nm, Green (510 ± 10) nm
- Exposure H [lx.s]: 5 steps selectable for each exposure color
- Exposure homogeneity of each step: $\pm 0.01 \log(H)$
- Step wedge: 21 steps
- Step wedge constant: $0.15 \pm 5\%$
- Reference Sensitometer: According to DIN V 6868-55, provided with step wedge constant of $0.15 \pm 1\%$, Calibration: Every two years at Medset

Densitometer

- Specification: According to IEC 61223-2-1
- Spectral characteristic of light source: According to ANSI PH 2.19-1979 (DIN 4512-3)
- Aperture size (diameter): 3 mm
- Measuring range: $D=0-4.5$
- Measuring accuracy: $\pm 2.0\%$ for $D \leq 3$; $\pm (1.5-2)\%$ for $D > 3$
- Repeat accuracy: $\Delta D = \pm 0.01$

Other Data

- Dimensions: (240 × 165 × 60) mm
- Weight: 800 g (without batteries)
- Working temperature: 15 °C – 35 °C
- Integrated operator's guidance
- Multi lingual (available languages: German, French, English)

Parts to be delivered

- 1 DARKLIGHT device
- 4 Pins for film positioning
- 1 Calibrating strip with $D \approx 2.8$
- 4 Mignon Alkaline batteries (1.5V)
- 1 Instruction for use, English
- 1 Power supply

Versions

- DARKLIGHT SENSI
- DARKLIGHT SENSI REF
- DARKLIGHT DENSI EC
- DARKLIGHT DUO EC

Authorized Distributor: