

Quality Assurance at Image Display Devices
Spot-Luminance-Meter LXcan |



The efficient solution
for luminance measurements at Image Display Devices |

LXcan - *Luminance / Illuminance Meter*

*Extremely compact :
complete electronics, sensor and display in a single unit
+ easy to use
+ highly precise
+ classified as medical product class I, measuring device of class B
= the ideal measuring device for Quality Assurance measurements
according to IEC, AAPM and DIN.*

The new **LXcan**, the efficient successor of our well-known **LXplus** offers extensive improvements in handling and technical design including:

- Large backlight display that shows readings and also supports alignment and adjustment of the measurement spot at the test monitor.
- Targeting Device:
an integrated camera which is generating an image of the target on the display of the **LXcan**: a visible circle symbolizing the measuring spot, has to point at the real measuring area on the IDD display.
- Contactless distance sensor: The color of the circle signalizes via its color (green or red), if the measuring distance of 50 cm is obeyed.
- Inclination sensor for precise user alignment of viewing angle.
- New compact optic design and box housing integrates the **LXplus** stray light reducing front tube camera into the housing of the new **LXcan**. Test display generated at the front lens of luminance meters limits the luminance resolution to the level of stray light.
- Newly designed compact focusing optic with 1.6 field of view offers a slightly increased signal to noise ratio at very low luminance levels.
- RS 232 and USB interfaces enable remote control operation of the instrument as well as on-line operation with power supplied via the RS 232 or USB interfaces.
- Rechargeable lithium battery supports the increased power need of the large size back lighted display and powerful microprocessor.
- Recharge via USB interfaces is accomplished by connecting to a PC, laptop or optional power supply.

Overall

the new **LXcan** offers improved specifications and simpler handling in a new style housing.

Technical specifications |

- ▶ Luminance Meter; 0.05 to 10000 cd/m² with F.O.V. ~ 1.6 °
- ▶ Photometric V(λ) Uncertainty ≤ 3 %
- ▶ Extra Low Stray-Light Rejection for High Contrast Ratio
- ▶ Distance and Imaging Sensor for Measurements at 50 cm
- ▶ External Illuminance Detector; 0.1 to 10000 lx
- ▶ RS 232 and USB Interfaces
- ▶ Rechargeable Lithium Battery

Luminance Measurement Range:	0.05 to 10000 cd/m ²
Maximum Luminance Resolution	0.05 cd/m ²
f1*Uncertainty of V(λ) Response:	≤ 3 %
General Uncertainty:	≤ 10 %
F.O.V Lens:	~ 1.6 °
Influence of outfield luminance f ₂ (U):	≤ 0.6 %
Stray-Light-Baffle:	Integrated
Measurement Distance:	50 cm
Measurement Spot:	2 cm at 50 cm distance
Distance Sensor:	Ultrasonic
Illuminance Measurement Range: ¹⁾	0.1 to 10000 lx
Total Uncertainty:	≤ 10 %
Display:	1.2" TFT
Control Buttons:	Three
Interface:	USB, RS 232
Battery rechargeable via USB:	Li-Ion
Housing:	Al; Tripod Adapter
Dimensions:	220 x 80 x 45 mm
Weight:	500 g
Power consumption (use with USB):	approx. 450 mA
Expected operation time (battery use):	approx. 8 h

¹⁾ Optional Detector Head

Technical data are subject to change without prior notice.

The calibration of the measuring system is done in a calibration laboratory for optical radiant units and is traceable to national standards.

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