

# MAVO - SPOT 2 USB

Luminance Spotmeter with measuring angle of 1°, Accuracy Class B

### Features

- High precision spotmetering of the luminance with a measuring angle of 1° according to DIN 5032-7, Class B and DIN EN 13023-1, Appendix B
- SLR viewfinder with measuring circle of 1° and viewing field of 15°
- Measuring from the distance from 1 m to ∞, with close-up lenses (optional) down to 34 cm
- Contact measurement with optional Measuring Probe
- Backlight display illumination with LCD read-out in the viewfinder
- The silicon photo diode is colour corrected, i.e. its spectral responsivity is matched to the photopic daylight vision of the human eye  $V(\lambda)$
- Remarkably easy, one hand use, with only four buttons and 1 sliding switch
- Configuration via DIP Switches in the battery compartment
- Automatic measuring range selection, total range 0.01 cd/m<sup>2</sup> to 99.990 cd/m<sup>2</sup> subdivided in four measuring ranges and 0,003 to 29.187 foot Lambert
- Data memory for up to 1000 single measuring values, or alternatively in 10 groups
- USB 2.0 Port
- Tripod socket
- CD Rom included with software for visualizing and processing the values measured and controlling the meter.
- Aluminum transport case, USB cable incl. in the supply



The high reliability and precision make the MAVO-SPOT 2 USB ideally suitable for measuring:

- Monitors taking into consideration the ambient light, e.g. official inspections or constancy tests in medical applications according to DIN 6868-57 and IEC 61223-2-5. For luminance measurement at viewing monitors in computer tomography, digital radiography, viewing panels for X-ray films and other medical systems.
- Lighting of streets, roads, tunnels and airfields
- Light reflections at work places according to the applicable Protective Laws and regulations for people at work
- Lighting in museums, in public buildings and places
- Projection screens, for checking the uniformity of the illumination

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**MAVO-SPOT 2 USB****Specifications:**

|                          |   |
|--------------------------|---|
| Type                     | Luminance meter, with precision single lens reflex optical system, display in view-finder   |
| Measuring angle          | 1 °   |
| Accuracy                 | Class B according to DIN 5032-7 in all chapters and DIN EN 13032-1, Appendix B  |
| Optical system           | Stray light error ambient light (fs (u) < 2%)   |
| Field of view            | 15 ° diagonal   |
| Focusing distance        | 1 m to ∞ - focusing with external ring at the lens  |
| Light sensor             | Silicon photo diode with V(λ) filter (f1 < 3%)  |
| Luminance measuring unit | cd/m <sup>2</sup> or fL (selectable with DIP switches)  |
| Measuring ranges         | Automatic measuring range selection<br>0.01 cd/m <sup>2</sup> to 99 990 cd/m <sup>2</sup> in four ranges or<br>0,003 fL to 29 187 fL in four ranges   |
| Measuring functions      | Luminance in cd/m <sup>2</sup> or fL (selectable)<br>Luminance percentage<br>Memory MEM<br>Correction Factor CORR<br>Measuring the illuminance (Lux) with GOSSEN Reflexion Standard ( optional accessory) |
| Measuring mode           | Measurement from the distance (Close-up lenses for shorter distances, optional accessories)<br>Contact measurement (Measuring Probe for contact measurement, optional accessory)                          |
| Data memory              | Up to 1000 individual measurement values, or in 10 groups (adjustable with DIP switch in the battery compartment)   |
| USB Port                 | USB 2.0 (1.1 compatible)  |
| Operating elements       | Easy to use with 4 buttons, 1 sliding switch<br>Configuration with DIP switches in the battery compartment  |
| Operating temperature    | 0° C to 50° C, According to EN 61010-1:2001, cl. 1.4.1  |
| Storage temperature      | -20°C to +70°C  |
| Power supply             | 2 x 1,5 V, size AA, when connected to PC, power will be supplied via the USB cable  |
| Software                 | gLux software and additional applications   |
| Others                   | Tripod socket   |
| Weight                   | appr. 400 g without batteries   |
| Standard equipment       | Meter in aluminum transport case, gLux software incl. meter driver, USB cable, lens cover, eye piece, batteries and instruction manual  |
| Optional accessories     | Close-up lens 1 (51 cm to 100 cm), close-up lens 2 (34 cm to 50 cm), Measuring Probe for contact measurement, Reflexion Standard for Lux measurement, Stray light screen, Carrying strap                  |

## MAVO-SPOT 2 USB

### Applications:

The MAVO-SPOT 2 USB is a precision measuring instrument for the specific requirements of the professional user with a measuring angle of 1°. The meter provides luminance measurements from the distance from 1 m to ∞, while taking into consideration the ambient light. The MAVO-SPOT 2 USB is equipped with a high quality SLR optical system having a viewing field of 15° and clearly marked measuring angle of 1° in the center as well as an external focusing ring. Two close-up lenses (optional) permit reducing the measuring distance down to 34 cm.

Contact measurements of the luminance direct on the screen of the monitor can be made with the precision photometric Measuring Probe. (Optional accessory).

The light sensor is colour corrected, i.e. its spectral responsivity is matched to the photopic daylight vision of the human eye  $V(\lambda)$ . The accuracy classification for luminance meters is defined in DIN 5032-7, class B and in EN 13032-1, Appendix B. The MAVO-SPOT 2 USB fully meets all the regulations of the class B.

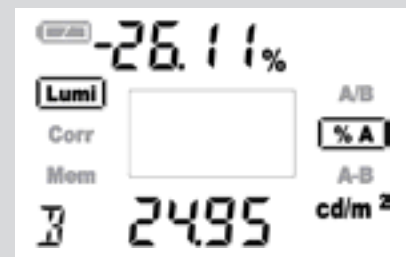
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Read-out in the display of luminance measurement



Luminance ratio measurement A/B



Luminance ratio measurement percentage % A



Lux measurement with Reflexion Standard



Corrections entered



Memory read-out

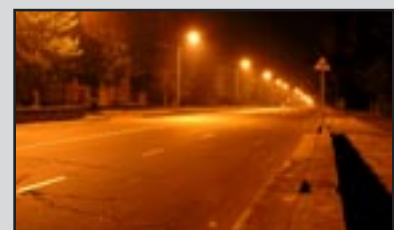
### Examples for using the MAVO-SPOT 2 USB:



Lighting of tunnels



Measuring the reflections at monitors



Lighting of streets

### MAVO-SPOT 2 *USB*



The MAVO-SPOT 2 *USB* is supplied in a practical, strong aluminum transport case



Measuring probe for contact measurements



GOSSEN Reflexion Standard



Close-up lenses 1 and 2



Carrying strap

#### Applications - Examples:



Contrast measurements



Measuring light immissions



Measuring airfield guidance lights

#### Ordering information:

| Description   | Ordering code |
|---|---------------|
| <b>Mavo-Spot 2 USB</b> incl. Aluminum transport case, USB cable, CD Rom, lens cover, eye piece. batteries, instruction manual | M508G         |
| Measuring probe for contact measurement, incl. adapter disk and lens cover  | M511G         |
| Close-up lens 1 (measurement between 51 cm and 100 cm)  | M496G         |
| Close-up lens 2 (measurement between 34 cm and 50 cm)   | M497G         |
| GOSSEN - Reflexion Standard for measuring Lux   | M512G         |
| Stray light screen  | M513G         |
| Carrying strap  | M514G         |
| Adapter ring for Gx - measurement   | M498G         |
| Calibration Certificate for MAVO-SPOT 2 (Please refer to page 12)   | H997B         |

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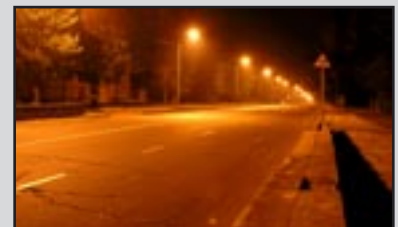
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