

# Luxmeters / Footcandle Meters

## MAVOLUX 5032 C USB / MAVOLUX 5032 B USB

### Features

- Illuminance can be measured in Lux or Footcandle
- Luminance can be measured in candles per square meter (cd/m<sup>2</sup>) or Footlambert (fL) with optional luminance attachments
- Wide measuring ranges
- High resolution
- Meets Standards DIN 5032-7 and CIE no. 69
- Silicon photo diode, colour corrected, i.e. its spectral responsivity is matched to the spectral photopic vision of the human eye  $V(\lambda)$ . The accuracy of that  $V(\lambda)$  matching is the main difference between the two MAVOLUX types C and B
- Cosine correction for oblique inciding light
- **USB 1.1 Interface**
- CD Rom with software for processing the values measured and regulating the meter
- Rugged instrument design, easy operation
- Ever-ready case, USB-cable included



### Applications

Digital Luxmeters and Luminance meters classified according to DIN 5032-7 and CIE 69. Wide range of applications: for light technicians, for the control of light sources, street lights, lighting of work places, public buildings, sports facilities; for quality control and quality assurance in the manufacture of lamps and light sources; for light designers and architects; for measurements in agriculture and horticulture.

Both MAVOLUX types allow measuring very high light intensities (brightest daylight, head lights) without any additional accessories. Especially the MAVOLUX 5032 B having an initial sensitivity of 0.01 lx allows measuring extremely low light intensities, such as emergency lighting. Most important: The MAVOLUX 5032B is optimally suited for certification and official inspection procedures due to its high precision acc. to Class B.

### Functions and Technical Data

#### Automatic / Manual Measuring Range Selection

Either Lux or footcandles can be selected as a measurement unit. The measuring range is matched automatically to the measurement value. The current measuring range can be locked by pressing a key, or any one of four or five (MAVOLUX 5032B USB) measuring ranges can be selected manually.

#### Function „Hold“

The current measurement value can be held at the display by pressing the data hold key.

#### Function „Mem“

Storage in memory of upto 100 values, read-out in the display or via USB port

#### Measuring rate

2 measurements per second

#### Light sensor

Silicon photo diode with  $V(\lambda)$  filter, complies with accuracy class

**MAVOLUX 5032 C USB:** DIN 5032-7 Class C

**MAVOLUX 5032 B USB:** DIN 5032-7 Class B

#### Display

LCD display size 50 mm x 25 mm  
Display/Digit Height 7 segments characters/13 mm  
3 ½ digits

Overload Display „OL“ appears in display

#### Power Supply

Battery 1,5 V alkaline-manganese cell (IEC LR 6), size AA  
Battery Life approx. 45 hours continuous operation, When the meter is connected to a PC, power will be supplied by the PC via the USB cable  
Battery test „-“ symbol is automatically displayed when battery voltage drops below appr.1V

# Digital Luxmeter MAVOLUX 5032 C USB / MAVOLUX 5032 B USB

## Battery Saver Circuit

The instrument is automatically switched off, if the measurement value remains unchanged for approximately 4 minutes, and if none of the operating elements has been activated during this time.

## Continuous operation

For using the instrument in the continuous operation mode, keep the key HOLD pushed down and then press the key ON/OFF. Pushing the key ON/OFF again will end the operation

## Electromagnetic Compatibility EMC

The MAVOLUX meet the Specifications 89/336/EWG dt. 01.01.1996

## Mechanical Design

Dimensions Basic instrument 65 x 120 x 19 mm  
Sensor 31 x 105 x 30 mm

## Cable between Instrument and Sensor

MAVOLUX 5032 C-USB: coiled cord, permanently attached  
MAVOLUX 5032 B-USB: plug-in coiled cord.

Cable Length 1,5 m; available also in 3 m, 5 m or 10 m – on special order

Weight approx. 200 g without battery

## Standard Equipment

1 Battery 1,5 V  
1 Instruction manual  
1 USB – Cable  
1 CD-ROM with software for processing the values measured and regulating the measuring instrument  
1 ever-ready case for luxmeter

## Optional Accessories

1 Luminance attachment  $\text{cd/m}^2$  incl. case  
1 Luminance attachment  $\text{fL}$  incl. case  
1 Calculator, calculating disc for exposure time/aperture combinations and additional values for photography

## Ordering Numbers

Description	Order No.	Price
MAVOLUX 5032 C USB - according to DIN 5032-7 Class C incl. ever-ready case, USB - cable, Software	M502G	
MAVOLUX 5032 B USB - according to DIN 5032-7 Class B incl. ever-ready case, USB - cable, Software	M503G	
Luminance attachment, $\text{cd/m}^2$ with case	5908V0120	
Luminance attachment $\text{fL}$ with case	Z481B	
Calculator in case	5999V0380	
Calibration certificate for MAVOLUX 5032 C/B-USB	H997B	
Optional: Special lengths of connecting cable: 3 or 5 or 10 meters	please call	

## Calibration Certificate – optional at additional price

Calibration reference: Scientific Standard Lamp, type Wi 41 G of the PTB, (Physikalisch Technische Bundesanstalt Braunschweig – National Standards Institute). This Calibration Certificate is necessary for all applications, where measurements, controls and inspections are required by the relevant laws and regulations.

## Technical Data MAVOLUX 5032 C USB

Meas. Quantity		Measuring Range in Lux (lx)	Meas. Range in footcandle (fc)	Resolution in Lux	Resolution in fc
Illuminance	I	0.1 ... 199.9	0.01 ... 19.99	0.1	0.01
	II	1 ... 1 999	0.1 ... 199.9	1	0.1
	III	10 ... 19 900	1 ... 1 999	10	1
	IV	100 ... 199 000	10 ... 19 990	100	10
		in candela/m <sup>2</sup>	in footlambert	in $\text{cd/m}^2$	in fL
Luminance (with attach.)	I	1 ... 1 999	0.1 ... 199.9	1	0.1
	II	10 ... 19 990	1 ... 1 999	10	1
	III	100 ... 199 900	10 ... 19 990	100	10
	IV	1000 ... 1 999 000	100 ... 199 900	1000	100

## Technical Data MAVOLUX 5032 B USB

Meas. Quantity		Measuring Range in Lux (lx)	Meas. Range in footcandle (fc)	Resolution in Lux	Resolution in fc
Illuminance	I	0.01 ... 19.99	0.001 ... 1.999	0.01	0.001
	II	0.1 ... 199.9	0.01 ... 19.99	0.1	0.01
	III	1 ... 1 999	0.1 ... 199.9	1	0.1
	IV	10 ... 19 900	1 ... 1 999	10	1
	V	100 ... 199 000	10 ... 19 990	100	10
		in candela/m <sup>2</sup>	in footlambert	in $\text{cd/m}^2$	in fL
Luminance (with attach.)	I	0.1 ... 199.9	0.01 ... 19.99	0.1	0.01
	II	1 ... 1 999	0.1 ... 199.9	1	0.1
	III	10 ... 19 999	1 ... 1 999	10	1
	IV	100 ... 199 900	10 ... 19 990	100	10
	V	1000 ... 1 999 000	100 ... 199 900	1000	100