

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/m²) 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 (λ). The accuracy of that V (λ) 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 (λ) 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	„-I-“ 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/EEG 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 cd/m² incl. case
1 Luminance attachment fL incl. case
1 Calculator, calculating disc for exposure time/aperture combinations and additional values for photography

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 ²	in footlambert	in 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 ²	in footlambert	in 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

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, cd/m ² with case	5908V0120	
Luminance attachment 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	