

## OVERVIEW

The MS-LUX luxmeter is designed to measure the intensity of illumination of a natural or artificial light source. A measuring cell is used to convert the beam emitted from the light into an electrical output signal which is proportional to the intensity of illumination and, at the same time, the beam is amplified by a precise amplifier into an analog output signal of a defined voltage or a 4..20 mA current. The optical filter is transparent for wave lengths of 350..750 nm. This corresponds to that proportion of the beam, that is visible to the human eye. Very unique is the glass dome which protects the measuring cell from all the weather conditions and the newly offered threshold depending output switch, which can directly switch on/off a light or can be feed to a control unit.



## ADVANTAGES

- Ready to use with an integrated box level
- Measurement range 0..10 kLux or 160 kLux
- Output signal: 0..50mV passive, standardized or with amplifier inside 0..10 V, 4..20 mA
- Custom output signal/measurement range on request
- Protection class IP67
- Easy and fast levelling/mounting due to fixation with integrated knurled screws
- Programmable threshold output switch
- Low temperature drift



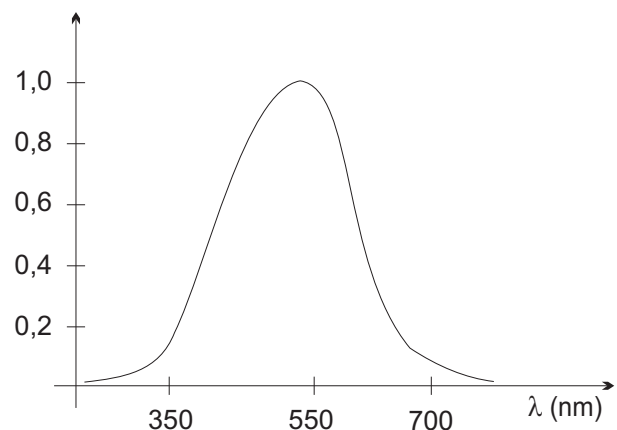
## OUTPUT

The appeal of the MS/ML-LUX lies in the multitude of output signals. Beside a voltage or current output a programmable threshold switch is available. Threshold value, hysteresis and time delay should be defined prior to ordering as they are factory settings.

## APPLICATIONS

- Building automation and services
- Lightness measurement at workspace (often regulated by trade association)
- Intensity dependent light control in museums, schools, etc.
- Greenhouses for control irrigation
- Shade installations
- Dimmer switch e.g. for outside lighting

## SPECTRAL RESPONSE



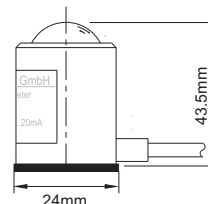
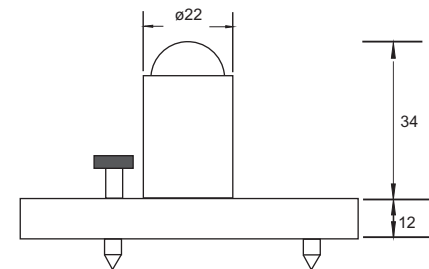
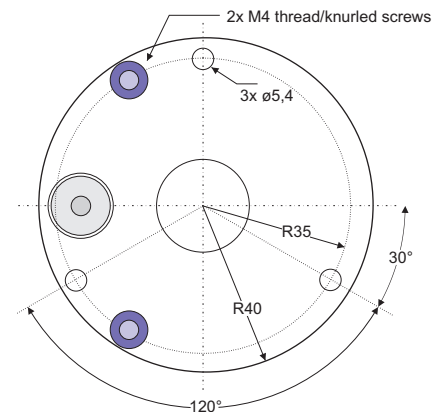
## TECHNICAL DATA

With amplifier	MS-LUX (indoor)	MS-LUX (outdoor)
Measurement range	0..10 kLux	0..160 kLux
Output	0..1 V 0..5 V 0..10 V @>5 kOhm load  4..20 mA @<200 Ohm load custom specific short circuit, inverse polarity and over- load protected up to U	0..1 V 0..5 V 0..10 V @>5 kOhm load  4..20 mA @<200 Ohm load custom specific short circuit, inverse polarity and over- load protected up to U
Threshold switch 20-100 % full scale	max. 24 V/0,5 A 24 V against U <sub>GND</sub>	max. 24 V/0,5 A 24 V against U <sub>GND</sub>
Temperatur drift Spectral response Long term drift Refresh time Offset Cosine-error	<0,1 %/K 350..750 nm <2 %/year <<1 s <5 mV@0 kLux <10 %@80°	<0,1 %/K 350..750 nm <2 %/year <<1 s <5 mV@0 kLux <10 %@80°
Power supply Operating temp Cable Weight	12..24 V (7 mA@24 V) -40 °C..+60 °C 2m / 4x0,22 mm <sup>2</sup> ca. 150 g	12..24 V (7 mA@24V) -40 °C..+60 °C 2m / 4x0,22 mm <sup>2</sup> ca.150 g

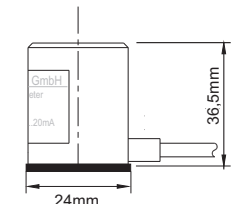
Without amplifier	ML-LUX (indoor)	ML-LUX (outdoor)
Measuring range	0..10 kLux	0..160 kLux
Output	0..50 mV	0..50 mV
Housing	Smart S	Smart XS

## DIMENSION

ML/MS-LUX with standard housing



MS-LUX Smart S



MS-LUX Smart XS

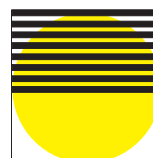
## ORDERING CODE

Mx-	LUX	P	M	O	G*	H*	T*	
					Output <b>0..50mV</b> <b>0..1V</b> <b>0..10V</b> <b>4..20mA</b> <b>custom</b>	Disered threshold value 20-100% fs. <b>(F.s.) x %</b>	Hysteresys <b>xx kLux</b>	Switching on/off time delay <b>xx minutes</b>
		<b>Professional*</b> if threshold active	Measuring range <b>10 kLux</b> <b>160 kLux</b> <b>custom</b>					

x= S with amplifier  
x= L without amplifier

\* only for professional version  
with threshold

## YOUR LOCAL REPRESENTATIVE



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Technical data is subject to change.  
Version: Luxmeter\_E\_0977-4