

Flicker Sensor LiSens with USB connection

The source of LED lights flicker is typically their driver. If the driver is not designed for small ripple output, flicker could be a problem, which can cause strobe effects, visual fatigue, headache and difficulty concentrating. If LEDs are also dimmable, flicker is hardly predictable, and can only be determined by measurement.

The flicker measurement device LiSens provides perfect the solution.

The LiSens sensor is connected via USB to a Windows or Android device. Connection to a mobile phone or a tablet allows for mobile use. The measurements can then be analysed via the *Flicker Measurement Studio* App. At the moment, the App supports evaluations like Flicker %, IEEE 1789, P_{st}^{LM} or SVM. The software allows for integration of additional evaluation metrics available in the future.

The high accuracy makes the LiSens an ideal solution for measurements in laboratory and development environments, and an essential tool for illumination design and lightning industries.

- · Suitable for lighting industries, illumination design engineering, but also end users
- Optical sensor with spectral sensitivity according to $V(\lambda)$
- Data transfer and power supply via USB
- Up to 250 measurements in stand-alone recording mode
- Including App Flicker Measurement Studio for Windows and Android
- Visualization of light as wave and spectrum diagram
- Time domain and frequency domain flicker analysis
- · Creation of test reports for illuminants
- · High accuracy based on 16 Bit AD converter with 100 kHz sampling rate
- Pro version with ultra fast 5 MHz sampling for measuring also high frequency flicker affecting video cameras and barcode readers
- · High quality aluminium casing with tripod mount



Measurement Parameters

Optical sensor	Spectral response analogous to
	CIE 1931 luminosity curve,
	fs value 8% typical
Measurement range	200/2000/20000 lx
Signal frequency range	0.1 Hz to 10.0 kHz
Sampling rate	100 kHz, 16 Bit
LiSens Pro:	
Signal frequency range	up to 500.0 kHz
Sampling rate	100 kHz, 16 Bit/ 5 MHz, 8 Bit

Measurement Features

Measurement time	
sampling mode	0.1 s - 120 s
data transmission mode	unlimited
Luminance	1 - 20000 lx
Flicker	
Time domain	Precent Flicker, Flicker Index (IES),
	Modulation Depth, frequency,
	P _{st} ^{LM} (IEC 61547)
Frequency domain	SVM (CIE), Mp (ASSIST), IEEE 1789
Visualization:	wave and spectrum diagram

Technical Data

Android (6++), Windows 10
USB 2.0, Micro B
USB powered, lithium-ion battery
5VDC, 100/500 mA per USB
112 x 69 x 34 mm
230 g
1/4" tripod mount
5 – 35°C

Scope of delivery

Flicker Measurement Device LiSens (100 kS)	ArtNo 230	
Flicker sensor LiSens, mini tripod, USB cable, charger,		
software Flicker Measurement Studio, transport case		
Flicker Measurement Device LiSens Pro (5 MS)	ArtNo 231	
Flicker sensor LiSens Pro, mini tripod, USB cable, charger,		

Subject to technical alterations.

Professional flicker measurement device for lighting industries and mobile use





Fauser

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