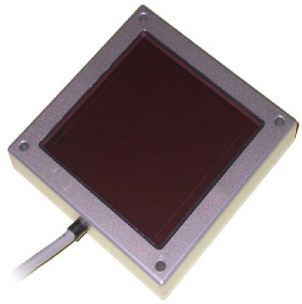
Light-meter: technical data



General

Plug'n'Play	
Voltage supply	5V DC (via USB)
Current	max 10mA
Housing	special glas, Aluminum anodised
Lenght x width x height	92 x 92 x 15 mm
Weight	370 g (270 g sensor + 100 g USB-cable)
Measurement range	500 mikro-Lux to 200 000 Lux
Noise	20 mikro-Lux at 1 mLux
Recording rate	adjustable from 1 per s to 1 per hour
Detection limit	50 – 100 mikro-Lux
Operating temperature	-25°C to 80°C
Storage temperature	-30°C to 110°C
Maintainance	maintainaince free

Installation
The sensor is weather-proof;
Four holes with 4.2mm diameter;
Mount on isolating material (e.g. Wood);
Computer within about 20m of sensor.

System Requirements

1. Computer with operating system, one of:
   - Windows XP/NT/2000, or
   - Linux with Virtualbox2 + Windows virtual machine;
2. USB port;
3. 18 MB disk-space for lightmeter software.

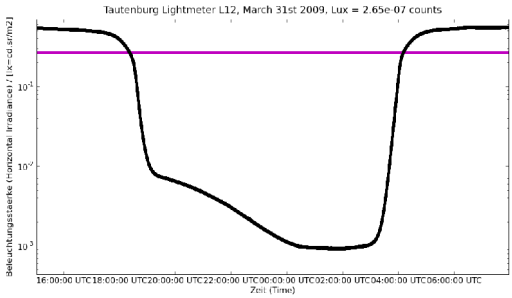
Typical data-rates
1.5 MB/month for 1 measurement per minute
350 kB/week for 1 measurement per minute
3 MB/day for 1 measurement per second

Software-download and further information:

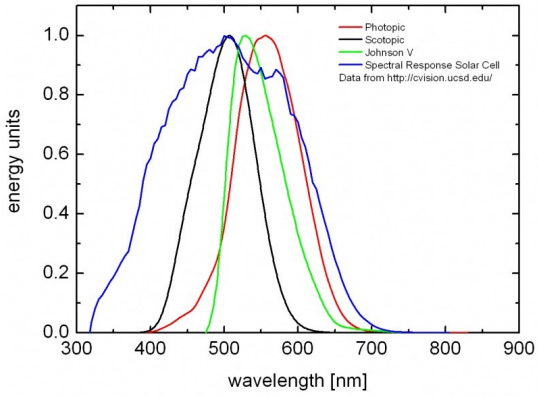
http://lightmeter.astronomy2009.org
Login: Guest IYA2009

Requests: lightmeter@astronomy2009.at

Technical changes may occur, version of April 15th, 2009

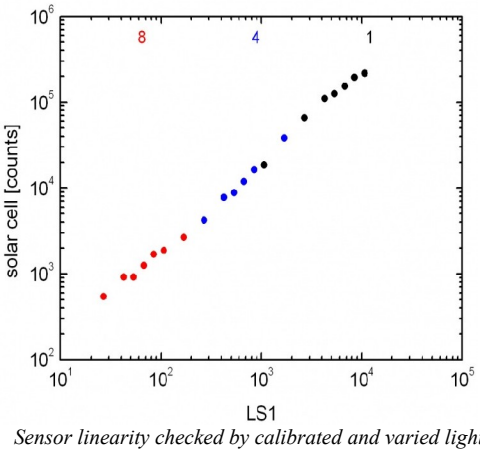


Lightmeter at Tautenburg. Photometric night with half-moon before local midnight and decreasing to one mlx later. Note the nonlinear daylight part above the full-moon brightness (magenta horizontal line).



Spectral sensitivity and bands relevant to the human eye.

Lightmeter and USB-cable compared to 1 Euro coin.



Sensor linearity checked by calibrated and varied light source.