

# LXP-1

## DATALOGGING LIGHT METER

**FOTON**  
software for making protocols  
after measurement according  
to EN 12464 !



### Standard accessories:

- battery 9V (1 pcs.)
- USB transmission cable
- CD with software „Light Meter” for measurement configuration
- operating manual
- carrying case
- calibration certificate issued by calibration laboratory

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# LXP-1

The digital light meter is a precision instrument used to measure illuminance (Lux, footcandle) in the field. It meets CIE photopic spectral response. It is fully cosine corrected for the angular incidence of light. The illuminance meter is compact, robust and easy to handle according to its construction. The light sensitive component used in the meter is a very stable, long-life silicon photo diode and spectral response filter.

The most important features of LXP-1 are:

- Light-measuring levels ranging from 0,1Lx...0,1kLx (0,01FC...0,01kFC).
- High accuracy and quick time response.
- „DATA HOLD” function, for holding measured values.
- Automatic zeroing.
- Correction factor does not to be manually calculated for non-standard light sources.
- High sampling rate and quick reaction for changes of illuminance.
- „PEAK-HOLD” function for tracing the peak signal of light pulse with least duration 10µs and keep it.
- Auto power off (15 minutes) or disable AUTO power off.
- Maximum and minimum measurements.
- Relative reading.
- Easy to read large backlit display.
- USB output connect with PC.
- Four measuring ranges.
- Memory of 99 measurement result.
- Data logger for more than 16000 results.

<b>Rated operational conditions:</b>	
- operating temperature and humidity	0...40°C
- storage temperature and humidity	0% to 80% RH -10...50°C 0% to 70% RH
<b>Other technical data:</b>	
- display	3½ digit LCD with high speed 40 segment bargraph
- over range indication	OL displayed
- repeatability	±3%
- spectral response	CIE photopic (CIE human eye response curve)
- cosine response (f2')	±2%
- sampling rate	1,3 times/sec
- power supply	battery 9V
- photo detector	one silicon photo diode and spectral response filter
- photo detector lead length	approx. 150cm
- photo detector dimensions	115 × 60 × 20mm
- meter dimensions	170 × 80 × 40mm
- weight	390g

## Illuminance measurement

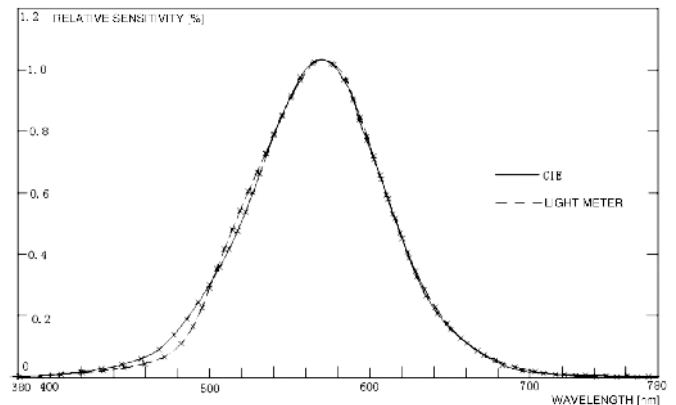
Range	Spectral accuracy	Accuracy
400,0 Lx 40,00 FC	CIE Vλ Function f1' ±6%	±(3% m.v. + 0,5% f.s.) (<10,000 Lx)
4000 Lx 400,0 FC		±(4% m.v. + 10 digits) (>10,000 Lx)
40,00 kLx 4000 FC		
400,0 kLx 40,00 kFC		

1FC=10,76Lx; 1kLx=1000Lx; 1kFC=1000FC

„f.s.” means full scale  
„m.v.”- measured value

## Spectral sensitivity characteristic

The applied photo diode with filters makes that spectral sensitivity characteristic is well suited to the requirements of the C.I.E. curve (INTERNATIONAL COMMISSION ON ILLUMINATION). Photo curve V (λ) as the following chart described.



Spectral sensitivity characteristic.

## Optional accessories:

- „FOTON” software for making protocols after measurement according to EN 12464

**WAPROFOTON**

