



DATA SHEET

LX 50

Luxmeter


Easy to use

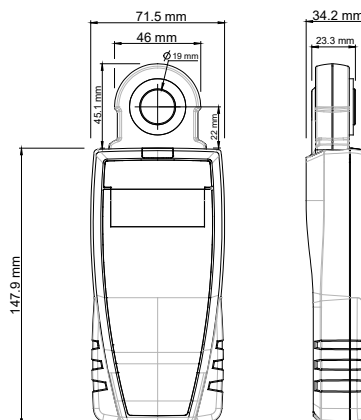
Built-in probe

Hold function

Auto shut-off: 20 minutes

Features of housing

Material	ABS
Protection	IP54
Display	2 lines, LCD technology, 50 x 36 mm. 1 line of 5 digits with 7 segments (value) 1 line of 5 digits with 16 segments (unit)
Height of digits	Values: 9.2 mm. Units: 4.7 mm
Weight	200 g (with batteries)



Technical specifications

Parameter	Light
Measuring unit	lux, klux, fc
Measuring range	From 0 to 10000 lux / From 0 to 929 fc
Accuracy ⁽¹⁾	±3% of reading or ±3 lux
Resolution	From 0 to 999.9 lux: 0.1 lux / from 1000 to 10000 lux: 1 lux From 0 to 0.9999 klux: 0.0001 klux / from 1 to 10 klux: 0.001 klux From 0 to 99.99 fc: 0.01 fc / from 100 to 929 fc: 0.1 fc
Response time	$T_{63} = 5 \text{ s}$
Measuring element	Silicon photodiode
Directional sensitivity (f2) ⁽²⁾	< 6%
Linearity (f3) ⁽²⁾	< 3%
Conditions of use (°C/%RH/m)	From 0 to +50 °C. In non-condensation condition. From 0 to 2000 m.
Storage temperature	From -10 to +70 °C
Power supply	4 batteries AAA LR03 1.5 V
Battery life	20 hours

European directives

2014/30/EU EMC; 2014/35/EU Low Tension; 2011/65/EU RoHS II; 2012/19/EU WEEE

⁽¹⁾ All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

⁽²⁾ The f2 and f3 coefficient are defined according to the French NF C 42-710 standard.

Order of magnitude of lux according to applications

Environment	Lux
Outside with open air	500 to 25 000
Outside with direct sunlight	50 000 to 100 000
Full moon night	1
Overnight lit street	20 to 70
Apartment well lit	200 to 400

Environment	Lux
Factory: electronic assembling	1500 to 3000
Hotel reception hall	200 to 500
Shop	750 to 1500
Hospital operating room	750 to 1500
Classroom	200 to 750

Factor value according to the light sources

The following table indicates the factor value corresponding to different light sources with their examples. The device is adjusted with an incandescent standard white light source owning its own spectral response. The following lighting sources can be measured by the LX50 and have a different spectral response. Therefore, the presented coefficients in the following table enable to correct the measurement according to these different sources. The correction is carried out by multiplying the measured value by the F factor: Corrected value = F x measured value.

Source	F factor
Fluorescent tube with three bands	1.346
High pressure mercury lamp	1.437
Sodium vapour lamp	1.401
Metal halide lamp with three additives	1.237

Source	F factor
Rare-earth metal halide lamp	1.013
White led: neutral colour	1.121
Halogen quartz lamp / tungsten (standard source)	1

Kit content

Instruments are supplied with an adjustment certificate and a soft case.

Accessories

Reference	Description
-	Calibration certificate
MT 51	Soft case
CQ 15	Magnetic protective housing



Only the accessories supplied with the device must be used.

Warranty

Instruments have 1-year warranty for any manufacturing defect (return to our After-Sales Service required for appraisal).

Maintenance:

We carry out calibration, adjustment and maintenance of your instruments to guarantee a constant level of quality of your measurements. As part of Quality Assurance Standards, we recommend you to carry out a yearly checking.

Precautions for use:

Please always use the device in accordance with its intended use and within parameters described in the technical features in order not to compromise the protection ensured by the device.