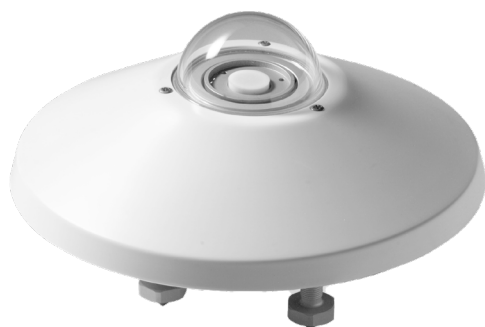


LPPHOT02



LPPHOT02 – PHOTOMETRIC PROBE

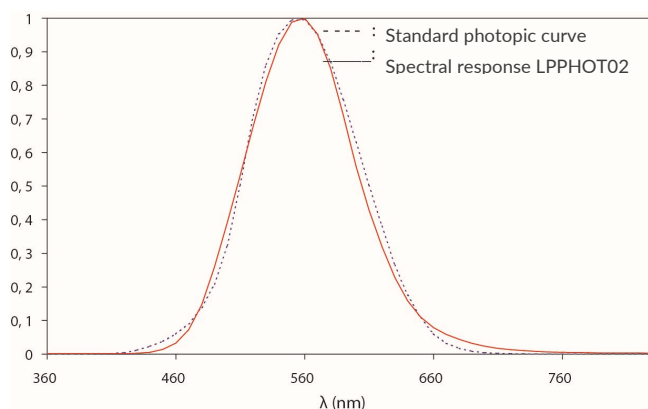
The **LPPHOT02** probe measures illuminance (lux), defined as the ratio of the luminous flux incident on a surface to the area of that surface. Its spectral response reproduces the sensitivity of the human eye according to the standard photopic curve $V(\lambda)$.

Designed for long-term outdoor installations, it is particularly suitable for daylight monitoring in meteorological and climatological applications. The 50 mm dome protects the sensor from atmospheric agents, while the diffuser and housing geometry ensure a response close to the cosine law.

CALIBRATED ILLUMINANCE MEASUREMENT

Each probe is individually calibrated at the factory by comparison with the reference luxmeter of the Senseca metrology laboratory, using an illuminant A in accordance with CIE Publication No. 69. The individual calibration factor is indicated on the probe label and in the Calibration Report.

The family is available with passive mV, 4...20 mA and voltage outputs. For all active analog versions, the 0...150 klux measurement range corresponds to the full output range.



Standard photopic curve $V(\lambda)$ and spectral response of the LPPHOT02

Technical specifications	
Measuring range	0...150 klux
Typical sensitivity (passive)	0.5...2 mV/klux
Viewing range	2π sr
Spectral range	Standard photopic curve
Response time	<0.5 s (95%)
Directional response (cosine law)	<8% (0...80°)
Long-term instability (1 year)	< 3 %
Error f°1	<9%
Non-linearity	< 1 %
Temperature response	<0.1%/°C
Impedance (passive version)	0.5...1 K Ω
Connection	4-pole M12
Operating temperature	-40...+80 °C
Weight	Approx. 900 g

ORDERING CODES

Radiometer versions		
Code	Output	Power supply
LPPHOT02	Passive mV	Not required
LPPHOT02AC	4...20 mA, 2-wire	10...30 Vdc
LPPHOT02AV1	0...1 V	10...30 Vdc
LPPHOT02AV5	0...5 V	10...30 Vdc
LPPHOT02AV	0...10 V	15...30 Vdc

Standard supply - Each probe is supplied with a protective screen, silica gel cartridge, 2 silica gel refills, levelling device, free female M12 connector (only if the optional cable is not ordered) and Calibration Report. Cables and mounting accessories must be ordered separately.

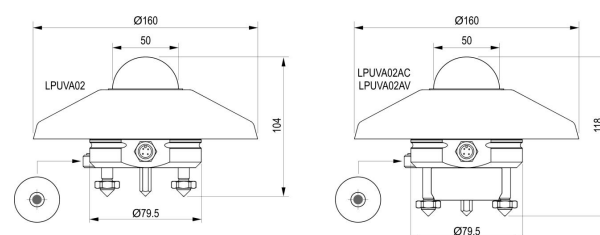
Fixing accessories	
LPS1	Fixing bracket for Ø30...50 mm mast; installation on horizontal or vertical mast.

Installation cables	
CPM12AA4.5	4-pole M12 cable, open wires, 5 m.
CPM12AA4.10	4-pole M12 cable, open wires, 10 m.

Connection notes -The passive LPPHOT02 version does not require a power supply; its output impedance is 0.5...1 k Ω . For the 4...20 mA version, the maximum load resistance is 500 Ω . For the voltage output versions, the minimum load resistance is 100 k Ω .

Spare parts	
LPSP1	UV-resistant solar radiation protection screen.
LPG	Silica-gel, 5 sachets.
LPSPG	Desiccant cartridge, complete with O-ring and cap.

Dimensions (mm)



Passive version (left); active versions (right)